EPA WORK ASSIGNMENT NUMBER: 076–2JZZ
EPA CONTRACT NUMBER: 68–W8–0110
FOSTER WHEELER ENVIRONMENTAL CORPORATION

ARCS II PROGRAM

FINAL
SCREENING SITE INSPECTION (SSI)
ERDLE PERFORATING SITE
TOWN OF GATES
MONROE COUNTY, NEW YORK
CERCLIS NO: NYD982531865

DECEMBER 1995

VOLUME IV OF IV

NOTICE

RECOMMENDATIONS

The overall site score is 2.48. The groundwater and surface water pathways were scored on a potential-to-release basis because contamination could not be confirmed due to the lack of validated data. The soil pathway was scored on an observed contamination basis owing to the presence of volatile organics in on-site soils. The air pathway was also scored on a potential-to-release basis.

The groundwater pathway score is 0.48. The bedrock aquifer is utilized for drinking water purposes by an estimated population of 613 within the target distance limit (TDL). No groundwater resources were identified.

The surface water pathway score is 0.61. There are several sensitive environments within the 15-mile downstream surface water TDL including wetlands, state-designated areas for the protection of aquatic life, and a candidate for the federal threatened or endangered species list. There are also recreational fisheries along the TDL. However, there are no drinking water intakes along the downstream TDL.

The soil pathway score is 0.61. Workers are present at the site, but there are no residences, schools, or day-care centers within 200 feet of sources.

The air pathway score is 4.87. There is a population of 91,544 people residing within four miles of the site. In addition, there are 3,475 acres of wetlands and several sensitive environments within the TDL.

Existing data for the site were not validated in accordance with USEPA Region 2 procedures, and therefore, were not used to establish observed releases for scoring purpose. The existing data do suggest that proper validated data would likely result in confirmation of observed releases to groundwater and surface water. However, due to the small number of targets in the groundwater and surface water pathways, confirmation of observed releases to these pathways does not result in a score above 28.5. The likelihood of identifying targets subject to actual contamination is very small, since there are no groundwater targets within 1/2-mile of the site, no surface water intakes within the TDL, and only a small number of sensitive environments and wetlands along the surface water TDL.

Based on the available information and analysis presented herein, a No Further Remedial Action Planned (NFRAP) is recommended for the Erdle Perforating site.

NPL Characteristics Data Collection Form
Erdle Perforating - 11/16/95

Record Information

1. Site Name: Erdle Perforating
   (as entered in CERCLIS)
2. Site CERCLIS Number: NYD982531865
3. Site Reviewer: Katherine B. Galanti
4. Date: November 1995
5. Site Location: Town of Gates/Monroe County/New York
   (City/County,State)
6. Congressional District:
7. Site Coordinates: Single

   Latitude: 43 08'20.0" Longitude: 077 42'50.0"

Site Description

1. Setting: Suburban
2. Current Owner: Private - Industrial
3. Current Site Status: Inactive
4. Years of Operation: A one-time event (spill), date: 2/5/87
5. How Initially Identified: Other - Tank failed integrity test
6. Entity Responsible for Waste Generation:

   - Manufacturing
     - Other Manufacturing

7. Site Activities/Waste Deposition:

   - Tanks - Below Ground

Waste Description

8. Wastes Deposited or Detected Onsite:

   - Solvents

Response Actions

9. Response/Removal Actions:

   - Other Removal Action Has Occurred

RCRA Information

10. For All Active Facilities, RCRA Site Status:

    - Not Applicable

Demographic Information

11. Workers Present Onsite: Yes

12. Distance to Nearest Non-Worker Individual: > 10 Feet - 1/4 Mile

13. Residential Population Within 1 Mile: 4298.0

14. Residential Population Within 4 Miles: 91544.0

Water Use Information

15. Local Drinking Water Supply Source:

    - Ground Water (within 4 mile distance limit)

16. Total Population Served by Local Drinking Water Supply Source: 613.0

17. Drinking Water Supply System Type for Local Drinking Water Supply Sources:

    - Private

18. Surface Water Adjacent to/Draining Site:

- Stream

HRS DOCUMENTATION RECORD
Erdle Perforating - 11/16/95

1. Site Name: Erdle Perforating
   (as entered in CERCLIS)

2. Site CERCLIS Number: NYD982531865

3. Site Reviewer: Katherine B. Galanti

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5. Site Location: Town of Gates/Monroe County/New York
   (City/County,State)

6. Congressional District:

7. Site Coordinates: Single

   Latitude: 43 08'20.0" Longitude: 077 42'50.0"

	Score
Ground Water Migration Pathway Score (Sgw)	0.48
Surface Water Migration Pathway Score (Ssw)	0.61
Soil Exposure Pathway Score (Ss)	0.61
Air Migration Pathway Score (Sa)	4.87
Site Score	2.48

NOTE

EPA uses the terms "facility," "site," and "release" interchangeably. The term "facility" is broadly defined in CERCLA to include any area where hazardous substances have "come to be located" (CERCLA Section 109(9)), and the listing process is not intended to define or reflect boundaries of such facilities or releases. Site names, and references to specific parcels or properties, are provided for general identification purposes only. Knowledge regarding the extent of sites will be refined as more information is developed during the RI/FS and even during implementation of the remedy.

GROUND WATER MIGRATION PATHWAY SCORESHEET
Erdle Perforating - 11/16/95

GROUND WATER MIGRATION PATHWAY Factor Categories & Factors	Maximum Value	Value Assigned
Likelihood of Release to an Aquifer Aquifer: Shallow Bedrock		
1. Observed Release	550	0
2. Potential to Release		
2a. Containment	10	10
2b. Net Precipitation	10	1
2c. Depth to Aquifer	5	5
2d. Travel Time	35	35
2e. Potential to Release [lines 2a(2b+2c+2d)]	500	410
3. Likelihood of Release	550	410
Waste Characteristics		
4. Toxicity/Mobility	*	1.00E+02
5. Hazardous Waste Quantity	*	10
6. Waste Characteristics	100	6
Targets		
7. Nearest Well	50	9.00E+00
8. Population		
8a. Level I Concentrations	**	0.00E+00
8b. Level II Concentrations	**	0.00E+00
8c. Potential Contamination	**	7.00E+00
8d. Population (lines 8a+8b+8c)	**	7.00E+00
9. Resources	5	0.00E+00
10. Wellhead Protection Area	20	0.00E+00
11. Targets (lines 7+8d+9+10)	**	1.60E+01
12. Targets (including overlaying aquifers)	**	1.60E+01
13. Aquifer Score	100	0.48
GROUND WATER MIGRATION PATHWAY SCORE (Sgw)	100	0.48

* Maximum value applies to waste characteristics category.
** Maximum value not applicable.

SURFACE WATER OVERLAND/FLOOD MIGRATION COMPONENT SCORESHEET
Erdle Perforating - 11/16/95

SURFACE WATER OVERLAND/FLOOD MIGRATION COMPONENT Factor Categories & Factors DRINKING WATER THREAT	Maximum Value	Value Assigned
Likelihood of Release		
1. Observed Release	550	0
2. Potential to Release by Overland Flow		
2a. Containment	10	10
2b. Runoff	25	1
2c. Distance to Surface Water	25	20
2d. Potential to Release by Overland Flow [lines 2a(2b+2c)]	500	210
3. Potential to Release by Flood		
3a. Containment (Flood)	10	0
3b. Flood Frequency	50	0
3c. Potential to Release by Flood (lines 3a x 3b)	500	0
4. Potential to Release (lines 2d+3c)	500	210
5. Likelihood of Release	550	210
Waste Characteristics		
6. Toxicity/Persistence	*	4.00E+01
7. Hazardous Waste Quantity	*	10
8. Waste Characteristics	100	3
Targets		
9. Nearest Intake	50	0.00E+00
10. Population		
10a. Level I Concentrations	**	0.00E+00
10b. Level II Concentrations	**	0.00E+00
10c. Potential Contamination	**	0.00E+00
10d. Population (lines 10a+10b+10c)	**	0.00E+00
11. Resources	5	0.00E+00
12. Targets (lines 9+10d+11)	**	0.00E+00
13. DRINKING WATER THREAT SCORE	100	0.00

* Maximum value applies to waste characteristics category.
** Maximum value not applicable.

SURFACE WATER OVERLAND/FLOOD MIGRATION COMPONENT SCORESHEET
Erdle Perforating - 11/16/95

SURFACE WATER OVERLAND/FLOOD MIGRATION COMPONENT Factor Categories & Factors HUMAN FOOD CHAIN THREAT	Maximum Value	Value Assigned
Likelihood of Release		
14. Likelihood of Release (same as line 5)	550	210
Waste Characteristics		
15. Toxicity/Persistence/Bioaccumulation	*	2.00E+03
16. Hazardous Waste Quantity	*	10
17. Waste Characteristics	1000	10
Targets		
18. Food Chain Individual	50	2.00E+01
19. Population		
19a. Level I Concentrations	**	0.00E+00
19b. Level II Concentrations	**	0.00E+00
19c. Pot. Human Food Chain Contamination	**	3.03E-03
19d. Population (lines 19a+19b+19c)	**	3.03E-03
20. Targets (lines 18+19d)	**	2.00E+01
21. HUMAN FOOD CHAIN THREAT SCORE	100	0.51

* Maximum value applies to waste characteristics category.
** Maximum value not applicable.

SURFACE WATER OVERLAND/FLOOD MIGRATION COMPONENT SCORESHEET
Erdle Perforating - 11/16/95

SURFACE WATER OVERLAND/FLOOD MIGRATION COMPONENT Factor Categories & Factors ENVIRONMENTAL THREAT	Maximum Value	Value Assigned
Likelihood of Release		
22. Likelihood of Release (same as line 5)	550	210
Waste Characteristics		
23. Ecosystem Toxicity/Persistence/Bioacc.	*	2.00E+03
24. Hazardous Waste Quantity	*	10
25. Waste Characteristics	1000	10
Targets		
26. Sensitive Environments		
26a. Level I Concentrations	**	0.00E+00
26b. Level II Concentrations	**	0.00E+00
26c. Potential Contamination	**	4.00E+00
26d. Sensitive Environments (lines 26a+26b+26c)	**	4.00E+00
27. Targets (line 26d)	**	4.00E+00
28. ENVIRONMENTAL THREAT SCORE	60	0.10
29. WATERSHED SCORE	100	0.61
30. SW: OVERLAND/FLOOD COMPONENT SCORE (Sof)	100	0.61

* Maximum value applies to waste characteristics category.
** Maximum value not applicable.

GROUND WATER TO SURFACE WATER MIGRATION COMPONENT SCORESHEET
Erdle Perforating - 11/16/95

GROUND WATER TO SURFACE WATER MIGRATION COMPONENT Factor Categories & Factors DRINKING WATER THREAT	Maximum Value	Value Assigned
Likelihood of Release to Aquifer Aquifer: Overburden		
1. Observed Release	550	0
2. Potential to Release		
2a. Containment	10	10
2b. Net Precipitation	10	1
2c. Depth to Aquifer	5	5
2d. Travel Time	35	35
2e. Potential to Release [lines 2a(2b+2c+2d)]	500	410
3. Likelihood of Release	550	410
Waste Characteristics		
4. Toxicity/Mobility/Persistence	*	4.00E+01
5. Hazardous Waste Quantity	*	10
6. Waste Characteristics	100	3
Targets		
7. Nearest Intake	50	0.00E+00
8. Population		
8a. Level I Concentrations	**	0.00E+00
8b. Level II Concentrations	**	0.00E+00
8c. Potential Contamination	**	0.00E+00
8d. Population (lines 8a+8b+8c)	**	0.00E+00
9. Resources	5	0.00E+00
10. Targets (lines 7+8d+9)	**	0.00E+00
11. DRINKING WATER THREAT SCORE	100	0.00

* Maximum value applies to waste characteristics category.
** Maximum value not applicable.

GROUND WATER TO SURFACE WATER MIGRATION COMPONENT SCORESHEET
Erdle Perforating - 11/16/95

GROUND WATER TO SURFACE WATER MIGRATION COMPONENT Factor Categories & Factors HUMAN FOOD CHAIN THREAT	Maximum Value	Value Assigned
Likelihood of Release		
12. Likelihood of Release (same as line 3)	550	410
Waste Characteristics		
13. Toxicity/Mobility/Persistence/Bioacc.	*	2.00E+03
14. Hazardous Waste Quantity	*	10
15. Waste Characteristics	1000	10
Targets		
16. Food Chain Individual	50	6.00E+00
17. Population		
17a. Level I Concentrations	**	0.00E+00
17b. Level II Concentrations	**	0.00E+00
17c. Pot. Human Food Chain Contamination	**	1.81E-03
17d. Population (lines 17a+17b+17c)	**	1.81E-03
18. Targets (lines 16+17d)	**	6.00E+00
19. HUMAN FOOD CHAIN THREAT SCORE	100	0.30

* Maximum value applies to waste characteristics category.
** Maximum value not applicable.

GROUND WATER TO SURFACE WATER MIGRATION COMPONENT SCORESHEET
Erdle Perforating - 11/16/95

GROUND WATER TO SURFACE WATER MIGRATION COMPONENT Factor Categories & Factors ENVIRONMENTAL THREAT	Maximum Value	Value Assigned
Likelihood of Release		
20. Likelihood of Release (same as line 3)	550	410
Waste Characteristics		
21. Ecosystem Tox./Mobility/Persist./Bioacc.	*	2.00E+01
22. Hazardous Waste Quantity	*	10
23. Waste Characteristics	1000	3
Targets		
24. Sensitive Environments		
24a. Level I Concentrations	**	0.00E+00
24b. Level II Concentrations	**	0.00E+00
24c. Potential Contamination	**	1.00E+00
24d. Sensitive Environments (lines 24a+24b+24c)	**	1.00E+00
25. Targets (line 24d)	**	1.00E+00
26. ENVIRONMENTAL THREAT SCORE	60	0.01
27. WATERSHED SCORE	100	0.31
28. SW: GW to SW COMPONENT SCORE (Sgs)	100	0.31

* Maximum value applies to waste characteristics category.
** Maximum value not applicable.

SOIL EXPOSURE PATHWAY SCORESHEET
Erdle Perforating - 11/16/95

SOIL EXPOSURE PATHWAY Factor Categories & Factors RESIDENT POPULATION THREAT	Maximum Value	Value Assigned
Likelihood of Exposure		
1. Likelihood of Exposure	550	550
Waste Characteristics		
2. Toxicity	*	1.00E+04
3. Hazardous Waste Quantity	*	10
4. Waste Characteristics	100	18
Targets		
5. Resident Individual	50	0.00E+00
6. Resident Population		
6a. Level I Concentrations	**	0.00E+00
6b. Level II Concentrations	**	0.00E+00
6c. Resident Population (lines 6a+6b)	**	0.00E+00
7. Workers	15	5.00E+00
8. Resources	5	0.00E+00
9. Terrestrial Sensitive Environments	***	0.00E+00
10. Targets (lines 5+6c+7+8+9)	**	5.00E+00
11. RESIDENT POPULATION THREAT SCORE	**	4.95E+04

* Maximum value applies to waste characteristics category.
** Maximum value not applicable.
*** No specific maximum value applies, see HRS for details.

SOIL EXPOSURE PATHWAY SCORESHEET
Erdle Perforating - 11/16/95

SOIL EXPOSURE PATHWAY Factor Categories & Factors NEARBY POPULATION THREAT	Maximum Value	Value Assigned
Likelihood of Exposure		
12. Attractiveness/Accessibility	100	1.00E+01
13. Area of Contamination	100	5.00E+00
14. Likelihood of Exposure	500	5.00E+00
Waste Characteristics		
15. Toxicity	*	1.00E+04
16. Hazardous Waste Quantity	*	10
17. Waste Characteristics	100	18
Targets		
18. Nearby Individual	1	1.00E+00
19. Population Within 1 Mile	**	4.00E+00
20. Targets (lines 18+19)	**	5.00E+00
21. NEARBY POPULATION THREAT SCORE	**	4.50E+02
SOIL EXPOSURE PATHWAY SCORE (Ss)	100	0.61

* Maximum value applies to waste characteristics category.
** Maximum value not applicable.

AIR PATHWAY SCORESHEET
Erdle Perforating - 11/16/95

AIR MIGRATION PATHWAY Factor Categories & Factors	Maximum Value	Value Assigned
Likelihood of Release		
1. Observed Release	550	0
2. Potential to Release		
2a. Gas Potential to Release	500	360
2b. Particulate Potential to Release	500	0
2c. Potential to Release	500	360
3. Likelihood of Release	550	360
Waste Characteristics		
4. Toxicity/Mobility	*	1.00E+04
5. Hazardous Waste Quantity	*	10
6. Waste Characteristics	100	18
Targets		
7. Nearest Individual	50	2.00E+01
8. Population		
8a. Level I Concentrations	**	0.00E+00
8b. Level II Concentrations	**	0.00E+00
8c. Potential Contamination	**	4.00E+01
8d. Population (lines 8a+8b+8c)	**	4.00E+01
9. Resources	5	0.00E+00
10. Sensitive Environments		
10a. Actual Contamination	***	0.00E+00
10b. Potential Contamination	***	2.00E+00
10c. Sens. Environments(lines 10a+10b)	***	2.00E+00
11. Targets (lines 7+8d+9+10c)	**	6.20E+01
AIR MIGRATION PATHWAY SCORE (Sa)	100	4.87E+00

* Maximum value applies to waste characteristics category.
** Maximum value not applicable.
*** No specific maximum value applies, see HRS for details.

WASTE QUANTITY

Erdle Perforating - 11/16/95

1. WASTESTREAM QUANTITY SUMMARY TABLE, SOURCE: TCE UST CONTAM SOIL

a. Wastestream ID	
b. Hazardous Constituent Quantity (C) (lbs.)	0.00
c. Data Complete?	NO
d. Hazardous Wastestream Quantity (W) (lbs.)	0.00
e. Data Complete?	NO
f. Wastestream Quantity Value (W/5,000)	0.00E+00

2. SOURCE HAZARDOUS WASTE QUANTITY FACTOR TABLE

a. Source ID	TCE UST CONTAM SOIL	
b. Source Type	Contaminated Soil	
c. Secondary Source Type	N.A.	
d. Source Vol.(yd3/gal) | Source Area (ft2)	0.00	561.00
e. Source Volume/Area Value	1.65E-02	
f. Source Hazardous Constituent Quantity (HCQ) Value (sum of 1b)	0.00E+00	
g. Data Complete?	NO	
h. Source Hazardous Wastestream Quantity (WSQ) Value (sum of 1f)	0.00E+00	
i. Data Complete?	NO	
k. Source Hazardous Waste Quantity (HWQ) Value (2e, 2f, or 2h)	1.65E-02	

Source Hazardous Substances	Depth (feet)	Liquid	Concent.	Units
Dichloroethylene, trans-1,2-	> 2	NO	3.5E+02	ppm
Tetrachloroethene	> 2	NO	6.0E+02	ppm
Trichloroethylene	> 2	YES	6.6E+03	ppm

Documentation for Source Type:

Source consists of contaminated soil associated with a TCE UST excavation. Analytical results indicated contaminated soil was present in the walls and floor of the excavation.

Reference: 9, pp. 14-16 of 57

WASTE QUANTITY

Erdle Perforating - 11/16/95

Documentation for Secondary Source Type:

There were no secondary sources associated with the contaminated soil.

Reference: 9, pp. 13 and 17 of 57

Documentation for Source Hazardous Substances:

Soil samples collected from the excavation pit of a TCE underground storage tank indicated the presence of contamination of organic solvents. Contaminants in the soil were caused by leakage from the tank.

Sample Location E was utilized as background because it contained the lowest volatile organic concentrations and no soil sample was collected from outside the excavation to use as background. TCE and PCE were undetectable in E; 1,2-DCE was detected at 0.66 ppm.

Sample Locations D, F-K, and M-P were contaminated with TCE at concentrations greater than three times background levels. TCE concentrations ranged from 0.053 to 6,618 ppm.

Sample Location D, G, H, J, and L-O were contaminated with 1,2-DCE at concentrations greater than three times background levels. 1,2-DCE concentrations ranged from 2.4 to 354 ppm.

Sample Locations D, F-H, J, O, and P were contaminated with tetrachloroethene (PCE) at concentrations greater than three times background levels. PCE concentrations ranged from 0.091 to 600 ppm.

Sample Location O contained the highest level of contamination of volatile organics.

Analytical data are not validated. Quantitation limits for this sample are 50 ppb (ug/kg).

Reference: 9, pp. 13 through 17 and 28 through 39 of 57

Documentation for Source Volume:

Contaminated soil area (Tier D) data only. No Tier C data available.

Reference:

WASTE QUANTITY

Erdle Perforating - 11/16/95

Documentation for Source Area:

Area of contamination calculated from surface area of walls and floor of excavation which indicated contaminant concentrations at levels greater than three times background.

Area of entire floor = 230 sq. ft.
Area of entire west wall = 95 sq. ft.
Area of entire east wall to a depth of 5 ft. = 73 sq. ft. (A 5 foot depth was used because the background sample (Sample E) is located at 5 ft.)
Area of entire south wall = 163 sq. ft.

Reference: 9, pp. 15 and 16 of 57

1. WASTESTREAM QUANTITY SUMMARY TABLE, SOURCE: SD-2

a. Wastestream ID	
b. Hazardous Constituent Quantity (C) (lbs.)	0.00
c. Data Complete?	NO
d. Hazardous Wastestream Quantity (W) (lbs.)	0.00
e. Data Complete?	NO
f. Wastestream Quantity Value (W/5,000)	0.00E+00

2. SOURCE HAZARDOUS WASTE QUANTITY FACTOR TABLE

a. Source ID	SD-2	
b. Source Type	Contaminated Soil	
c. Secondary Source Type	N.A.	
d. Source Vol.(yd3/gal)	0.00	Source Area (ft2) 1.00
e. Source Volume/Area Value	2.94E-05	
f. Source Hazardous Constituent Quantity (HCQ) Value (sum of 1b)	0.00E+00	
g. Data Complete?	NO	
h. Source Hazardous Wastestream Quantity (WSQ) Value (sum of 1f)	0.00E+00	
i. Data Complete?	NO	
k. Source Hazardous Waste Quantity (HWQ) Value (2e, 2f, or 2h)	2.94E-05	

Source Hazardous Substances	Depth (feet)	Liquid	Concent.	Units
Dichloroethylene, trans-1,2-	< 2	NO	1.0E+01	ppm
Tetrachloroethene	< 2	NO	3.9E-02	ppm
Trichloroethylene	< 2	NO	1.6E-01	ppm
Vinyl chloride	< 2	NO	4.8E-02	ppm

Documentation for Source Type:

Sampling performed by Radian Engineering in December 1994 indicated contaminants were present in a sediment sample from an intermittent surface water body on the site at concentrations greater than three times background levels. The intermittent sediment sample was evaluated as a soil sample.

Reference: 17, pp. 74 and 76 of 584

WASTE QUANTITY

Erdle Perforating - 11/16/95

Documentation for Secondary Source Type:

No secondary sources were found to be associated with SD-2.

Reference: 17, p. 32 of 584

Documentation for Source Hazardous Substances:

Based on validated analytical results of samples collected by Radian Engineering in December 1994.

The intermittent stream sediment sample (SD-2) was evaluated as a soil sample. Several volatile organics were detected in SD-2 at concentrations greater than three times background levels. 1,2-Dichloroethene was detected at 10,000D ppb, tetrachloroethene was detected at 39 ppb, trichloroethene was detected at 160 ppb, and vinyl chloride was detected at 48 ppb. Vinyl chloride and tetrachloroethene concentrations were flagged as "J" values during validation because the holding time was exceeded. However, these data were used to evaluate this source because there was no laboratory flag.

Soil sample SF-5 was designated as the upgradient background soil sample. No volatile organic compounds were detected at this location.

Reference: 17, pp. 49, 74, 76, 208-210, and 274 of 584

Documentation for Source Volume:

Contaminated soil area (Tier D) data only. No Tier C data available.

Reference:

Documentation for Source Area:

Contaminated area associated with SD-2 is unknown. An estimated area of 1 sq. ft. was used.

Reference:

1. WASTESTREAM QUANTITY SUMMARY TABLE, SOURCE: S-1

a. Wastestream ID	
b. Hazardous Constituent Quantity (C) (lbs.)	0.00
c. Data Complete?	NO
d. Hazardous Wastestream Quantity (W) (lbs.)	0.00
e. Data Complete?	NO
f. Wastestream Quantity Value (W/5,000)	0.00E+00

WASTE QUANTITY
Erdle Perforating - 11/16/95

2. SOURCE HAZARDOUS WASTE QUANTITY FACTOR TABLE

a. Source ID	S-1	
b. Source Type	Contaminated Soil	
c. Secondary Source Type	N.A.	
d. Source Vol.(yd3/gal)	0.00	Source Area (ft2) 1.00
e. Source Volume/Area Value	2.94E-05	
f. Source Hazardous Constituent Quantity (HCQ) Value (sum of 1b)	0.00E+00	
g. Data Complete?	NO	
h. Source Hazardous Wastestream Quantity (WSQ) Value (sum of 1f)	0.00E+00	
i. Data Complete?	NO	
k. Source Hazardous Waste Quantity (HWQ) Value (2e, 2f, or 2h)	2.94E-05	

Source Hazardous Substances	Depth (feet)	Liquid	Concent.	Units
Dichloroethylene, trans-1,2-	< 2	NO	1.0E-01	ppm
Trichloroethane, 1,1,1-	< 2	NO	2.4E-02	ppm
Trichloroethylene	< 2	NO	3.2E-02	ppm

Documentation for Source Type:

Based on validated analytical results from the RI by Radian, S-1 was found to be contaminated with volatile organic compounds at concentrations greater than three times background levels.

Reference: 17, pp. 47 and 49 of 584

Documentation for Secondary Source Type:

No secondary sources were reported to be associated with this source.

Reference: 17, pp. 47 and 49 of 584

Documentation for Source Hazardous Substances:

Based on validated analytical data collected by Radian in December 1994 S-1 was found to be contaminated with several volatile organic compounds. S-1 contained 24 ppb trichloroethane, 100 ppb 1,2-DCE, and 32 ppb TCE at concentrations greater than three times background levels.

SF-5 was designated as the background sample because of its location upgradient and away from sources. No volatile organics were detected in SF-5.

Reference: 17, pp. 47, 49, 206-207, and 274 of 584

Documentation for Source Volume:

Contaminated soil area (Tier D) data only. No Tier C data available.

Reference:

Documentation for Source Area:

Contaminated soil area is unknown. Area estimated to be 1 sq. ft.

Reference:

WASTE QUANTITY

Erdle Perforating - 11/16/95

1. WASTESTREAM QUANTITY SUMMARY TABLE, SOURCE: SF-1

a. Wastestream ID	
b. Hazardous Constituent Quantity (C) (lbs.)	0.00
c. Data Complete?	NO
d. Hazardous Wastestream Quantity (W) (lbs.)	0.00
e. Data Complete?	NO
f. Wastestream Quantity Value (W/5,000)	0.00E+00

WASTE QUANTITY
Erdle Perforating - 11/16/95

2. SOURCE HAZARDOUS WASTE QUANTITY FACTOR TABLE

a. Source ID	SF-1	
b. Source Type	Contaminated Soil	
c. Secondary Source Type	N.A.	
d. Source Vol.(yd3/gal)	0.00	Source Area (ft2) 1.00
e. Source Volume/Area Value	2.94E-05	
f. Source Hazardous Constituent Quantity (HCQ) Value (sum of 1b)	0.00E+00	
g. Data Complete?	NO	
h. Source Hazardous Wastestream Quantity (WSQ) Value (sum of 1f)	0.00E+00	
i. Data Complete?	NO	
k. Source Hazardous Waste Quantity (HWQ) Value (2e, 2f, or 2h)	2.94E-05	

Source Hazardous Substances	Depth (feet)	Liquid	Concent.	Units
Dichloroethylene, trans-1,2-	< 2	NO	6.6E-02	ppm

Documentation for Source Type:

Based on validated analytical data from the RI, SF-1 was found to be contaminated with volatile organic compounds at concentrations greater than three times background values.

Reference: 17, pp. 47 and 49 of 584

WASTE QUANTITY

Erdle Perforating - 11/16/95

Documentation for Secondary Source Type:

No secondary sources were found to be associated with this sample location.

Reference: 17, pp. 47 and 49 of 584

Documentation for Source Hazardous Substances:

Based on validated analytical data from soil samples collected by Radian in December 1994. SF-1 was found to contain 66 ppb of 1,2-DCE at concentrations greater than three times background levels.

SF-5 was designated as the background sample because of its upgradient location away from sources. No volatile organics were detected in SF-5.

Reference: 17, pp. 47, 49, 213-214, and 274 of 584

Documentation for Source Volume:

Contaminated soil area (Tier D) data only. No Tier C data available.

Reference:

Documentation for Source Area:

Contaminated soil area is unknown. Area of contamination estimated to be 1 sq. ft.

Reference:

1. WASTESTREAM QUANTITY SUMMARY TABLE, SOURCE: SF-2

a. Wastestream ID	
b. Hazardous Constituent Quantity (C) (lbs.)	0.00
c. Data Complete?	NO
d. Hazardous Wastestream Quantity (W) (lbs.)	0.00
e. Data Complete?	NO
f. Wastestream Quantity Value (W/5,000)	0.00E+00

WASTE QUANTITY

Erdle Perforating - 11/16/95

2. SOURCE HAZARDOUS WASTE QUANTITY FACTOR TABLE

a. Source ID	SF-2	
b. Source Type	Contaminated Soil	
c. Secondary Source Type	N.A.	
d. Source Vol.(yd3/gal)	0.00	Source Area (ft2) 1.00
e. Source Volume/Area Value	2.94E-05	
f. Source Hazardous Constituent Quantity (HCQ) Value (sum of 1b)	0.00E+00	
g. Data Complete?	NO	
h. Source Hazardous Wastestream Quantity (WSQ) Value (sum of 1f)	0.00E+00	
i. Data Complete?	NO	
k. Source Hazardous Waste Quantity (HWQ) Value (2e, 2f, or 2h)	2.94E-05	

Source Hazardous Substances	Depth (feet)	Liquid	Concent.	Units
Dichloroethylene, trans-1,2-	> 2	NO	5.1E+01	ppm
Trichloroethylene	> 2	NO	2.8E+00	ppm

Documentation for Source Type:

Based on validated analytical results from the RI, subsurface soil at SF-2 was found to be contaminated with volatile organic compounds at concentrations greater than three times background levels.

Reference: 17, pp. 47, 48, and 50 of 584

Documentation for Secondary Source Type:

No secondary sources were found to be associated with this location.

Reference: 17, pp. 47 and 50 of 584

Documentation for Source Hazardous Substances:

Based on validated analytical results from subsurface soil samples collected by Radian in December 1994. SF-2 was found to be contaminated with 51,000D ppb 1,2-DCE and 2,800 ppb TCE at concentrations greater than three times background levels.
SF-4 was designated as the background subsurface sample because of its upgradient location away from other sources. No 1,2-DCE or TCE was detected in SF-4.
SF-2 and SF-4 were sampled from the 5-7 foot intervals.

Reference: 17, pp. 47, 48, 50, 215-222, and 273 of 584

Documentation for Source Volume:

Contaminated soil area (Tier D) data only. No Tier C data available.

Reference:

Documentation for Source Area:

Area of contamination is unknown. Contaminated area estimated to be 1 sq. ft.

Reference:

WASTE QUANTITY

Erdle Perforating - 11/16/95

3. SITE HAZARDOUS WASTE QUANTITY SUMMARY

No.	Source ID	Migration Pathways	Vol. or Area Value (2e)	Constituent or Wastestream Value (2f,2h)	Hazardous Waste Qty. Value (2k)
1	TCE UST CONTAM SOIL	GW-SW-SE-A	1.65E-02	0.00E+00	1.65E-02
2	SD-2	GW-SW-SE-A	2.94E-05	0.00E+00	2.94E-05
3	S-1	GW-SW-SE-A	2.94E-05	0.00E+00	2.94E-05
4	SF-1	GW-SW-SE-A	2.94E-05	0.00E+00	2.94E-05
5	SF-2	GW-SW-SE-A	2.94E-05	0.00E+00	2.94E-05

WASTE QUANTITY
Erdle Perforating - 11/16/95

4. PATHWAY HAZARDOUS WASTE QUANTITY AND WASTE CHARACTERISTICS SUMMARY TABLE

Migration Pathway	Contaminant Values		HWQVs*	WCVs**
Ground Water	Toxicity/Mobility	1.00E+02	10	6
SW: Overland Flow, DW	Tox./Persistence	4.00E+01	10	3
SW: Overland Flow, HFC	Tox./Persis./Bioacc.	2.00E+03	10	10
SW: Overland Flow, Env	Etox./Persis./Bioacc.	2.00E+03	10	10
SW: GW to SW, DW	Tox./Persistence	4.00E+01	10	3
SW: GW to SW, HFC	Tox./Persis./Bioacc.	2.00E+03	10	10
SW: GW to SW, Env	Etox./Persis./Bioacc.	2.00E+01	10	3
Soil Exposure:Resident	Toxicity	1.00E+04	10	18
Soil Exposure: Nearby	Toxicity	1.00E+04	10	18
Air	Toxicity/Mobility	1.00E+04	10	18

* Hazardous Waste Quantity Factor Values
** Waste Characteristics Factor Category Values

Note: SW = Surface Water
GW = Ground Water
DW = Drinking Water Threat
HFC = Human Food Chain Threat
Env = Environmental Threat

GROUND WATER PATHWAY AQUIFER SUMMARY
Erdle Perforating - 11/16/95

No.	Aquifer ID	Type	Overlaying No.	Inter-Connected with	Likelihood of Release	Targets
1	Overburden	Non K	0	0	410	0.00E+00
2	Shallow Bedrock	Non K	1	0	410	1.60E+01

Containment

No.	Source ID	HWQ Value	Containment Value
1	TCE UST CONTAM SOIL	1.65E-02	10
2	SD-2	2.94E-05	10
3	S-1	2.94E-05	10
4	SF-1	2.94E-05	10
5	SF-2	2.94E-05	10
	Containment Factor		10

Documentation for Ground Water Containment, Source TCE UST CONTAM SOIL:

Based on HRS Table 3-2.
Evidence of hazardous substance migration from source area = 10.
Unvalidated analytical results indicate that groundwater has been impacted by volatile organic compounds.

Reference: 1, p. 1 of 1; 17, pp. 63-66 of 584

Documentation for Ground Water Containment, Source SD-2:

Based on HRS Table 3-2.
No liner = 10.
Source consists of contaminated sediment from an intermittent stream (soil) in an outfall ditch.

Reference: 1, p. 1 of 1; 17, p. 76 of 584

Documentation for Ground Water Containment, Source S-1:

Based on HRS Table 3-2.
No liner = 10.
No evidence of containment of contaminated soils and sediments.

Reference: 1, p. 1 of 1; 3, pp. 1-5 of 5

Documentation for Ground Water Containment, Source SF-1:

Based on HRS Table 3-2.
No liner = 10.
No evidence of containment of contaminated soil/sediment.

Reference: 1, p. 1 of 1; 3, pp. 1-5 of 5

Documentation for Ground Water Containment, Source SF-2:

Based on HRS Table 3-2.
No liner = 10.
No evidence of containment of contaminated soil/sediment.

Reference: 1, p. 1 of 1; 3, pp. 1-5 of 5

Net Precipitation

Net Precipitation (inches)	3

Documentation for Net Precipitation:

Based on HRS Figure 3-2. Net precipitation factor = 3.

Reference: 1, p. 1 of 1

GROUND WATER PATHWAY LIKELIHOOD OF RELEASE Overburden AQUIFER
Erdle Perforating - 11/16/95

Aquifer: Overburden

Type of Aquifer: Non Karst

Overlaying Aquifer: 0

Interconnected with: 0

Documentation for Overburden Aquifer:

Groundwater exists in two distinct zones at the site: the overburden and the shallow bedrock. The overburden aquifer is present from 1 to 2 feet below ground surface in the stratified drift and weathered glacial till materials. This aquifer extends to the top of the unweathered glacial till at a depth of approximately 8 to 9 feet below ground surface. The unweathered till is laterally consistent across the site. Groundwater flow in the overburden aquifer is to the south-southeast.

Reference: 17, pp. 38 through 46 of 584

OBSERVED RELEASE

No.	Well ID	Well Type	Distance (miles)	Level of Contamination

- N/A and/or data not specified

Observed Release Factor 0

POTENTIAL TO RELEASE

Containment

Containment Factor	10	

Net Precipitation

Net Precipitation Factor	1	

Depth to Aquifer

A. Depth of Hazardous Substances	7.00	feet

Documentation for Depth of Hazardous Substances:

Maximum depth of contamination is 7 feet. This is based on soil sampling conducted during the drilling of MW-1. A soil sample collected from a depth of 5 to 7 feet was found to contain 1,2-dichloroethene, trichloroethene, and total xylenes at concentrations greater than three times background levels. This data is validated and was generated as part of the Radian Corporation RI.

Reference: 17, pp. 47, 48, and 184 through 440 of 584

B. Depth to Aquifer from Surface	0.89	feet

Documentation for Depth to Aquifer from Surface :

MW-1 is the closest monitoring well to the former waste TCE UST, located adjacent to the former tank. The ground surface at this well has an elevation of 557.37 feet. The water level in this well is 556.48 feet. Therefore, the depth to the aquifer is 557.37 - 556.48 = 0.89 feet.

Reference: 17, pp. 44 and 119 of 584

C. Depth to Aquifer (B - A)	0.00	feet
Depth to Aquifer Factor	5	

Travel Time

Are All Layers Karst?	NO

Documentation for Karst Layers:

Karst geology was not identified to be present beneath the site.

Reference: 17, pp. 38 through 46 of 584

Thickness of Layer(s) with Lowest Conductivity	0.00	feet

Documentation for Thickness of Layers with Lowest Conductivity:

Since the overburden (unconfined) aquifer is being evaluated and the water table is less than 1 foot below ground surface, and the lowest known level of contamination is seven feet below ground surface, there are no layers between the lowest known level of contamination and the top of the aquifer.

Reference: 17, pp. 44, 47, 48, 119, and 184 through 440 of 584

Hydraulic Conductivity (cm/sec)	0.0E-00

Documentation for Hydraulic Conductivity:

There is no layer between the lowest known level of waste and the top of the aquifer since the top of the overburden aquifer is less than 1 foot below ground surface. As a result, there is no hydraulic conductivity.

Reference: 17, pp. 44, 47, 48, 119, and 184 through 440 of 584

Travel Time Factor	35
Potential to Release Factor	410

GROUND WATER PATHWAY LIKELIHOOD OF RELEASE Shallow Bedrock AQUIFER
Erdle Perforating - 11/16/95

Aquifer: Shallow Bedrock

Type of Aquifer: Non Karst

Overlaying Aquifer: 1

Interconnected with: 0

Documentation for Shallow Bedrock Aquifer:

Groundwater exists in two distinct zones at the site: the overburden aquifer and the shallow bedrock aquifer. The shallow bedrock aquifer is separated from the overlying overburden aquifer by a layer of low permeability, unweathered glacial till. The unweathered glacial till, ranging in thickness from 4 to 8 feet, acts as a confining layer for the shallow bedrock aquifer. The bedrock is comprised of the Lockport Dolomite and is not karst. Groundwater flow in the shallow bedrock is to the south-southeast.

The bedrock aquifer is not considered to be interconnected with the overburden aquifer because according to HRS Table 3-6, unweathered till is assigned a permeability of 10E-8 cm/sec. Permeability of the overburden at the site averages 3.9E-5 cm/sec. Permeability of the bedrock at the site averages 1.7E-1 cm/sec. Therefore, an intervening unit with a permeability of two orders of magnitude lower than the aquifers exists at the site and the aquifers are not interconnected.

Reference: 1, p. 1 of 1; 17, pp. 38-46 of 584

OBSERVED RELEASE

No.	Well ID	Well Type	Distance (miles)	Level of Contamination

- N/A and/or data not specified

Observed Release Factor 0

POTENTIAL TO RELEASE

Containment

Containment Factor	10	

Net Precipitation

Net Precipitation Factor	1	

Depth to Aquifer

A. Depth of Hazardous Substances	7.00	feet

Documentation for Depth of Hazardous Substances:

The maximum depth of contamination is 7 feet. This is based on soil sampling conducted during drilling of MW-1. A soil sample collected from a depth of 5 to 7 feet below ground surface was found to contain 1,2-dichloroethene, trichloroethene, and total xylenes at concentrations greater than three times background levels. These data were validated and were generated as part of the Radian Corporation RI.

Reference: 17, pp. 47, 48, and 184 through 440 of 584

B. Depth to Aquifer from Surface	13.00	feet

Documentation for Depth to Aquifer from Surface :

The average depth to the top of bedrock at the site is 13 feet below ground surface.

Reference: 17, p. 38 of 584

C. Depth to Aquifer (B - A)	6.00	feet
Depth to Aquifer Factor	5	

Travel Time

Are All Layers Karst?	NO

Documentation for Karst Layers:

Karst geology was not identified to be present beneath the site.

Reference: 17, pp. 38 through 46 of 584

Thickness of Layer(s) with Lowest Conductivity	3.00	feet

Documentation for Thickness of Layers with Lowest Conductivity:

The average depth to bedrock is 13 feet below ground surface. A low permeability, unweathered glacial till layer with thickness ranging from 4 to 8 feet overlies the bedrock. Disregarding any portion of this layer at depths of less than 10 feet below ground surface leaves us with a thickness of the unweathered glacial till of 3 feet.

Reference: 17, pp. 38 through 46 of 584

Hydraulic Conductivity (cm/sec)	1.0E-08

Documentation for Hydraulic Conductivity:

Based on HRS Table 3-6.
The layer with the lowest hydraulic conductivity is the unweathered glacial till. This layer is comprised compact, unfractured till.
Compact, unfractured till permeability = 10E-8 cm/sec.

Reference: 1, p. 1 of 1; 17. pp. 38 and 43 of 584

Travel Time Factor	35
Potential to Release Factor	410

Source: 1 TCE UST CONTAM SOIL

Source Hazardous Waste Quantity Value: 0.02

Hazardous Substance	Toxicity Value	Mobility Value	Toxicity/ Mobility Value
Dichloroethylene, trans-1,2-	100	1.00E+00	1.00E+02
Tetrachloroethene	100	1.00E-02	1.00E+00
Trichloroethylene	10	1.00E-02	1.00E-01

Source: 2 SD-2

Source Hazardous Waste Quantity Value: 0.00

Hazardous Substance	Toxicity Value	Mobility Value	Toxicity/ Mobility Value
Dichloroethylene, trans-1,2-	100	1.00E+00	1.00E+02
Tetrachloroethene	100	1.00E-02	1.00E+00
Trichloroethylene	10	1.00E-02	1.00E-01
Vinyl chloride	10000	1.00E-02	1.00E+02

GROUND WATER PATHWAY WASTE CHARACTERISTICS
Erdle Perforating - 11/16/95

Source: 3 S-1

Source Hazardous Waste Quantity Value: 0.00

Hazardous Substance	Toxicity Value	Mobility Value	Toxicity/ Mobility Value
Dichloroethylene, trans-1,2-	100	1.00E+00	1.00E+02
Trichloroethane, 1,1,1-	1	1.00E-02	1.00E-02
Trichloroethylene	10	1.00E-02	1.00E-01

Source: 4 SF-1

Source Hazardous Waste Quantity Value: 0.00

Hazardous Substance	Toxicity Value	Mobility Value	Toxicity/ Mobility Value
Dichloroethylene, trans-1,2-	100	1.00E+00	1.00E+02

Source: 5 SF-2

Source Hazardous Waste Quantity Value: 0.00

Hazardous Substance	Toxicity Value	Mobility Value	Toxicity/ Mobility Value
Dichloroethylene, trans-1,2-	100	1.00E+00	1.00E+02
Trichloroethylene	10	1.00E-02	1.00E-01

Hazardous Substances Found in an Observed Release

Well No.	Observed Release Hazardous Substance	Toxicity Value	Mobility Value	Toxicity/ Mobility Value

- N/A and/or data not specified

Toxicity/Mobility Value from Source Hazardous Substances:	1.00E+02
Toxicity/Mobility Value from Observed Release Hazardous Substances:	0.00E+00
Toxicity/Mobility Factor:	1.00E+02
Sum of Source Hazardous Waste Quantity Values:	1.66E-02
Hazardous Waste Quantity Factor:	10
Waste Characteristics Factor Category:	6

GROUND WATER PATHWAY TARGETS FOR AQUIFER Overburden
Erdle Perforating - 11/16/95

Population by Well

No.	Well ID	Sample Type	Distance (miles)	Level of Contamination	Population

- N/A and/or data not specified

Level I Population Factor: 0.00

Level II Population Factor: 0.00

Potential Contamination by Distance Category

Distance Category (miles)	Population	Value
> 0 to 1/4	0.0	0.00E+00
> 1/4 to 1/2	0.0	0.00E+00
> 1/2 to 1	0.0	0.00E+00
> 1 to 2	0.0	0.00E+00
> 2 to 3	0.0	0.00E+00
> 3 to 4	0.0	0.00E+00

Potential Contamination Factor: 0.000

Documentation for Target Population > 0 to 1/4 mile Distance Category:

Population was determined using population radius rings by Frost Associates, as well as more recent data obtained from Monroe County. Because of the shallow depth to bedrock, all private well users are assumed to draw water from the bedrock aquifer.

Reference: 20, p. 1 and 2 of 2; 19, p. 13 of 13

Documentation for Target Population > 1/4 to 1/2 mile Distance Category:

Population was determined using population radius rings by Frost Associates, as well as more recent data from Monroe County. Because of the shallow depth to bedrock, all private well users are assumed to draw water from the bedrock aquifer.

Reference: 20, pp. 1 and 2 of 2; 19, p. 13 of 13

Documentation for Target Population > 1/2 to 1 mile Distance Category:

Population was determined using population radius rings by Frost Associates, as well as more recent data from Monroe County. Because of the shallow depth to bedrock, all private well users are assumed to draw water from the bedrock aquifer.

Reference: 20, pp. 1 and 2 of 2; 19, p. 12 of 13

Documentation for Target Population > 1 to 2 miles Distance Category:

Population was determined using population radius rings by Frost Associates, as well as more recent data from Monroe County. Because of the shallow depth to bedrock, all private well users are assumed to draw water from the bedrock aquifer.

Reference: 20, pp. 1 and 2 of 2; 19, p. 12 of 13

Documentation for Target Population > 2 to 3 miles Distance Category:

Population was determined using population radius rings by Frost Associates, as well as more recent data from Monroe County. Because of the shallow depth to bedrock, all private well users are assumed to draw water from the bedrock aquifer.

Reference: 20, pp. 1 and 2 of 2; 19, p. 12 of 13

Documentation for Target Population > 3 to 4 miles Distance Category:

Population was determined using population radius rings by Frost Associates, as well as more recent data from Monroe County. Because of the shallow depth to bedrock, all private well users are assumed to get groundwater from the bedrock aquifer.

Reference: 20, pp. 1 and 2 of 2; 19, p. 12 of 13

Nearest Well

Level of Contamination: N.A.

Nearest Well Factor: 0.00E+00

Documentation for Nearest Well:

The nearest well to the site is a residential well located 0.92 mile south, on the south side of Chili Road in the Town of Chili. Although it is not known from what aquifer the well obtains its water, it is assumed to draw water from the bedrock aquifer because of the shallow depth to bedrock in the area.

Reference: Figure 1; 17, p. 114 of 584; 20, p. 1 of 2

Resources

Resource Use: NO

Resource Factor: 0.00E+00

Documentation for Resources:

No resources identified.

Reference: 22, p. 1 of 1

Wellhead Protection Area

No wellhead protection area

Wellhead Protection Area Factor: 0.00E+00

Documentation for Wellhead Protection Area:

There is no wellhead protection area located within Monroe County as per the Monroe County Environmental Management Council.

Reference: 22, p. 1 of 1

GROUND WATER PATHWAY TARGETS FOR AQUIFER Shallow Bedrock
Erdle Perforating - 11/16/95

Population by Well

No.	Well ID	Sample Type	Distance (miles)	Level of Contamination	Population

- N/A and/or data not specified

Level I Population Factor: 0.00

Level II Population Factor: 0.00

GROUND WATER PATHWAY TARGETS FOR AQUIFER Shallow Bedrock
Erdle Perforating - 11/16/95

Potential Contamination by Distance Category

Distance Category (miles)	Population	Value
> 0 to 1/4	0.0	0.00E+00
> 1/4 to 1/2	0.0	0.00E+00
> 1/2 to 1	3.0	1.00E-01
> 1 to 2	81.0	1.00E+00
> 2 to 3	210.0	2.10E+00
> 3 to 4	319.0	4.20E+00

Potential Contamination Factor: 7.000

Documentation for Target Population > 0 to 1/4 mile Distance Category:

Population determined using population radius rings by Frost Associates, as well as more recent data from Monroe County.

Reference: 20, pp. 1 and 2 of 2; 19, p. 13 of 13

Documentation for Target Population > 1/4 to 1/2 mile Distance Category:

Population determined using population radius rings by Frost Associates, as well as more recent data from Monroe County.

Reference: 20, pp. 1 and 2 of 2; 19, p. 13 of 13

Documentation for Target Population > 1/2 to 1 mile Distance Category:

Population determined using population radius rings by Frost Associates, as well as more recent data from Monroe County. Because of the shallow depth to bedrock, it is assumed that all private well users draw water from the bedrock aquifer.

Reference: 20, pp. 1 and 2 of 2; 19, p. 12 of 13

Documentation for Target Population > 1 to 2 miles Distance Category:

Population determined using population radius rings by Frost Associates, as well as more recent data from Monroe County. Because of the shallow depth to bedrock, it is assumed that all private well users draw water from the bedrock aquifer.

Reference: 20, pp. 1 and 2 of 2; 19, p. 12 of 13

Documentation for Target Population > 2 to 3 miles Distance Category:

Population determined using population radius rings by Frost Associates, as well as more recent data from Monroe County. Because of the shallow depth to bedrock, it is assumed that all private well users draw water from the bedrock aquifer.

Reference: 20, pp. 1 and 2 of 2; 19, p. 12 of 13

Documentation for Target Population > 3 to 4 miles Distance Category:

Population was determined using population radius rings by Frost Associates, as well as more recent data from Monroe County. Because of the shallow depth to bedrock, it is assumed that all private well users draw water from the bedrock aquifer.

Reference: 20, pp. 1 and 2 of 2; 19, p. 12 of 13

Nearest Well

Level of Contamination: Potential
Distance in miles: 0.92

Nearest Well Factor: 9.00E+00

Documentation for Nearest Well:

The nearest well to the site is a residential well located 0.92 mile to the south, on the south side of Chili Road in the Town of Chili. Although it is not known from what aquifer the well obtains its water, it is assumed that the well draws water from the bedrock aquifer because of the shallow depth to bedrock in the area.

Reference: Figure 1; 17, p. 114 of 584; 20, p. 1 of 2

Resources

Resource Use: NO

Resource Factor: 0.00E+00

Documentation for Resources:

Groundwater is not used as a resource within 4 miles of the site as per the Monroe County Environmental Management Council.

Reference: 22, p. 1 of 1

Wellhead Protection Area

No wellhead protection area

Wellhead Protection Area Factor: 0.00E+00

Documentation for Wellhead Protection Area:

There are no wellhead protection areas designated within Monroe County as per the Monroe County Environmental Management Council.

Reference: 22, p. 1 of 1

SURFACE WATER PATHWAY SEGMENT SUMMARY
Erdle Perforating - 11/16/95

No.	Segment ID	Segment Type	Water Type	Start Point (mi)	End Point (mi)	Average Flow (cfs)
1	Unnamed tributary	River	Fresh	-0.10	0.70	0
2	Little Black Creek	River	Fresh	0.70	4.60	2
3	Genesee River	River	Fresh	4.60	15.00	368

Documentation for segment: Unnamed tributary:

The unnamed tributary to Little Black Creek comprises the surface water segment from the PPE to 0.7 mile along the 15-mile surface water pathway. Average flow in the tributary is unknown, but was assumed to be less than 1 cfs.

Reference: 26, p. 1 of 1

Documentation for segment: Little Black Creek:

Little Black Creek comprises the surface water segment from the mouth of the unnamed tributary to the Genesee River, from miles 0.7 to 4.6. Average flow in Little Black Creek is unknown, but was assumed to be 2 cfs.

Reference: 26, p. 1 of 1

Documentation for segment: Genesee River:

The Genesee River comprises the last 11.4 miles of the 15-mile surface water pathway.
Long term average flow in the Genesee River at Rochester = 368 cfs.

Reference: 26, p. 1 of 1; 29, p. 4 of 4

SURFACE WATER PATHWAY OVERLAND FLOW/FLOOD COMPONENT LIKELIHOOD OF RELEASE
Erdle Perforating - 11/16/95

OBSERVED RELEASE

No.	Sample ID	Sample Type	Distance (miles)	Level of Contamination DW	HFC	Env

- N/A and/or data not specified

Observed Release Factor 0

SURFACE WATER PATHWAY OVERLAND FLOW/FLOOD COMPONENT LIKELIHOOD OF RELEASE
Erdle Perforating - 11/16/95

POTENTIAL TO RELEASE

Potential to Release by Overland Flow

Containment

No.	Source ID	HWQ Value	Containment Value
1	TCE UST CONTAM SOIL	1.65E-02	10
2	SD-2	2.94E-05	10
3	S-1	2.94E-05	10
4	SF-1	2.94E-05	10
5	SF-2	2.94E-05	10

Containment Factor: 10

Documentation for Overland Flow Containment, Source TCE UST CONTAM SOIL:

Based on HRS Table 4-2.
Site has no maintained engineered cover, no run-on control system and no runoff management system = 10.

Reference: 1, p. 1 of 1; 3, pp. 1-5 of 5

Documentation for Overland Flow Containment, Source SD-2:

Based on HRS Table 4-2.
Source has no maintained engineered cover, no run-on control system and no runoff management system = 10.

Reference: 1, p. 1 of 1; 3, pp. 1-5 of 5

SURFACE WATER PATHWAY OVERLAND FLOW/FLOOD COMPONENT LIKELIHOOD OF RELEASE
Erdle Perforating - 11/16/95

Documentation for Overland Flow Containment, Source S-1:

Based on HRS Table 4-2.
Site has no maintained engineered cover, no run-on control system, and no runoff management system = 10.

Reference: 1, p. 1 of 1; 3, pp. 1-5 of 5

Documentation for Overland Flow Containment, Source SF-1:

Based on HRS Table 4-2.
Site has no maintained engineered cover, no run-on control system, and no runoff management system = 10.

Reference: 1, p. 1 of 1; 3, pp. 1-5 of 5

Documentation for Overland Flow Containment, Source SF-2:

Based on HRS Table 4-2.
Site has no maintained engineered cover, no run-on control system and no runoff management system = 10.

Reference: 1, p. 1 of 1; 3, pp. 1-5 of 5

SURFACE WATER PATHWAY OVERLAND FLOW/FLOOD COMPONENT LIKELIHOOD OF RELEASE
Erdle Perforating - 11/16/95

Distance to Surface Water

Distance to Surface Water:	100.0 feet
Distance to Surface Water Factor:	20

Documentation for Distance to Surface Water:

The nearest surface water to the site is the unnamed tributary of Little Black Creek which forms the western boundary of the site. This tributary is located approximately 100 feet southwest of the former waste TCE UST.

Reference: Figure 1

Runoff

A. Drainage Area:	6.7 acres

Documentation for Drainage Area:

The site is calculated to be approximately 6.7 acres in size based on drawings in the RI report.

Reference: 17, p. 8 of 584

B. 2-year, 24-hour Rainfall:	2.5 inches

SURFACE WATER PATHWAY OVERLAND FLOW/FLOOD COMPONENT LIKELIHOOD OF RELEASE
Erdle Perforating - 11/16/95

Documentation for Rainfall:

2-year/24-hour rainfall for Monroe County is approximately 2.5 inches.

Reference: 25, p. 2 of 2

C. Soil Group: B
Medium-textured soils with moderate infiltration rates

Documentation for Soil Group:

As stated in the Radian Corp. RI, site soils are sandy loams from the Lamson series.
HRS Table 4-4 was used to determine the soil group. Sandy loam = B.

Reference: 1, p. 1 of 1; 17, p. 18 of 584; 4, pp. 7, 13, and 14 of 14

Runoff Factor: 1

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Potential to Release by Overland Flow Factor: 210

SURFACE WATER PATHWAY OVERLAND FLOW/FLOOD COMPONENT LIKELIHOOD OF RELEASE
Erdle Perforating - 11/16/95

Potential to Release by Flood

No.	Source ID	HWQ Value	Flood Containment Value	Flood Frequency Value	Potential to Release by Flood
- N/A and/or data not specified					

Potential to Release by Flood Factor: 0

Documentation for Flood Containment, Source TCE UST CONTAM SOIL:

No flood containment features were observed at the site.

Reference: 3, pp. 1-5 of 5

Documentation for Flood Frequency, Source TCE UST CONTAM SOIL:

Source is located beyond the 500-year floodplain boundary.

Reference: 24, pp. 2 and 3 of 3

Documentation for Flood Containment, Source SD-2:

No flood containment features exist on the site.

Reference: 3, pp. 1-5 of 5

Documentation for Flood Frequency, Source SD-2:

Site is located beyond the 500-year floodplain boundary.

Reference: 24, pp. 2 and 3 of 3

Documentation for Flood Containment, Source S-1:

No flood containment features were observed on the site.

Reference: 3, pp. 1-5 of 5

Documentation for Flood Frequency, Source S-1:

Based on FIRM map, source is located beyond the 500-year floodplain boundary.

Reference: 24, pp. 2 and 3 of 3

Documentation for Flood Containment, Source SF-1:

No flood containment features exist on the site.

Reference: 3, pp. 1-5 of 5

Documentation for Flood Frequency, Source SF-1:

Site is located beyond the 500-year floodplain boundary.

Reference: 24, pp. 2 and 3 of 3

Documentation for Flood Containment, Source SF-2:

No flood containment features exist on the site.

Reference: 3, pp. 1-5 of 5

Documentation for Flood Frequency, Source SF-2:

Site is located beyond the 500-year floodplain boundary.

Reference: 24, pp. 2 and 3 of 3

Source: 1 TCE UST CONTAM SOIL

Source Hazardous Waste Quantity Value: 0.02

Hazardous Substance	Toxicity Value	Persistence Value	Toxicity/ Persistence Value
Dichloroethylene, trans-1,2-	100	4.00E-01	4.00E+01
Tetrachloroethene	100	4.00E-01	4.00E+01
Trichloroethylene	10	4.00E-01	4.00E+00

SW PATHWAY: OVERLAND/FLOOD DRINKING WATER THREAT WASTE CHARACTERISTICS
Erdle Perforating - 11/16/95

Source: 2 SD-2

Source Hazardous Waste Quantity Value: 0.00

Hazardous Substance	Toxicity Value	Persistence Value	Toxicity/ Persistence Value
Dichloroethylene, trans-1,2-	100	4.00E-01	4.00E+01
Tetrachloroethene	100	4.00E-01	4.00E+01
Trichloroethylene	10	4.00E-01	4.00E+00
Vinyl chloride	10000	7.00E-04	7.00E+00

SW PATHWAY: OVERLAND/FLOOD DRINKING WATER THREAT WASTE CHARACTERISTICS
Erdle Perforating - 11/16/95

Source: 3 S-1

Source Hazardous Waste Quantity Value: 0.00

Hazardous Substance	Toxicity Value	Persistence Value	Toxicity/ Persistence Value
Dichloroethylene, trans-1,2-	100	4.00E-01	4.00E+01
Trichloroethane, 1,1,1-	1	4.00E-01	4.00E-01
Trichloroethylene	10	4.00E-01	4.00E+00

Source: 4 SF-1

Source Hazardous Waste Quantity Value: 0.00

Hazardous Substance	Toxicity Value	Persistence Value	Toxicity/ Persistence Value
Dichloroethylene, trans-1,2-	100	4.00E-01	4.00E+01

Source: 5 SF-2

Source Hazardous Waste Quantity Value: 0.00

Hazardous Substance	Toxicity Value	Persistence Value	Toxicity/ Persistence Value
Dichloroethylene, trans-1,2-	100	4.00E-01	4.00E+01
Trichloroethylene	10	4.00E-01	4.00E+00

Hazardous Substances Found in an Observed Release

Sample No.	Observed Release Hazardous Substance	Toxicity Value	Persistence Value	Toxicity/ Persistence Value

- N/A and/or data not specified

Toxicity/Persistence Value from Source Hazardous Substances:	4.00E+01
Toxicity/Persistence Value from Observed Release Hazardous Substances:	0.00E+00
Toxicity/Persistence Factor:	4.00E+01
Sum of Source Hazardous Waste Quantity Values:	1.66E-02
Hazardous Waste Quantity Factor:	10
Waste Characteristics Factor Category:	3

SW PATHWAY: OVERLAND FLOW/FLOOD COMPONENT DRINKING WATER THREAT TARGETS
Erdle Perforating - 11/16/95

Level I Concentrations

- N/A and/or data not specified

Level II Concentrations

- N/A and/or data not specified

Most Distant Level I Sample

- N/A and/or data not specified

Most Distant Level II Sample

- N/A and/or data not specified

SW PATHWAY: OVERLAND FLOW/FLOOD COMPONENT DRINKING WATER THREAT TARGETS
Erdle Perforating - 11/16/95

Level I Concentrations

Intake	Distance Along the In-water Segment from the Probable Point of Entry (miles)	Population
- N/A and/or data not specified		

Population Served by Level I Intakes: 0.0

Level I Population Factor: 0.00E+00

SW PATHWAY: OVERLAND FLOW/FLOOD COMPONENT DRINKING WATER THREAT TARGETS
Erdle Perforating - 11/16/95

Level II Concentrations

Intake	Distance Along the In-water Segment from the Probable Point of Entry (miles)	Population
- N/A and/or data not specified		

Population Served by Level II Intakes: 0.0

Level II Population Factor: 0.00E+00

SW PATHWAY: OVERLAND FLOW/FLOOD COMPONENT DRINKING WATER THREAT TARGETS
Erdle Perforating - 11/16/95

Potential Contamination

Intake ID	Average Annual Flow (cfs)	Population Served
- N/A and/or data not specified		

Type of Surface Water Body	Total Population	Dilution-Weighted Population
- N/A and/or data not specified		

Dilution-Weighted Population Served by Potentially Contaminated Intakes: 0.0

Potential Contamination Factor: 0.0

Nearest Intake

Location of Nearest Drinking Water Intake: N.A.

Nearest Intake Factor: 0.00

Resources

Resource Use: NO

Resource Value: 0.00E+00

Documentation for Resources:

No resources identified.

Reference:

SW PATHWAY: OVERLAND/FLOOD HUMAN FOOD CHAIN THREAT WASTE CHARACTERISTICS
Erdle Perforating - 11/16/95

Source: 1 TCE UST CONTAM SOIL

Source Hazardous Waste Quantity Value: 0.02

Hazardous Substance	Toxicity Value	Persistence Value	Bio-accum. Value	Toxicity/ Persistence/ Bioaccum. Value
Dichloroethylene, trans-1,2-	100	4.00E-01	5.00E+01	2.00E+03
Tetrachloroethene	100	4.00E-01	5.00E+01	2.00E+03
Trichloroethylene	10	4.00E-01	5.00E+01	2.00E+02

SW PATHWAY: OVERLAND/FLOOD HUMAN FOOD CHAIN THREAT WASTE CHARACTERISTICS
Erdle Perforating - 11/16/95

Source: 2 SD-2

Source Hazardous Waste Quantity Value: 0.00

Hazardous Substance	Toxicity Value	Persistence Value	Bio-accum. Value	Toxicity/ Persistence/ Bioaccum. Value
Dichloroethylene, trans-1,2-	100	4.00E-01	5.00E+01	2.00E+03
Tetrachloroethene	100	4.00E-01	5.00E+01	2.00E+03
Trichloroethylene	10	4.00E-01	5.00E+01	2.00E+02
Vinyl chloride	10000	7.00E-04	5.00E+00	3.50E+01

SW PATHWAY: OVERLAND/FLOOD HUMAN FOOD CHAIN THREAT WASTE CHARACTERISTICS
Erdle Perforating - 11/16/95

Source: 3 S-1

Source Hazardous Waste Quantity Value: 0.00

Hazardous Substance	Toxicity Value	Persistence Value	Bio-accum. Value	Toxicity/ Persistence/ Bioaccum. Value
Dichloroethylene, trans-1,2-	100	4.00E-01	5.00E+01	2.00E+03
Trichloroethane, 1,1,1-	1	4.00E-01	5.00E+00	2.00E+00
Trichloroethylene	10	4.00E-01	5.00E+01	2.00E+02

SW PATHWAY: OVERLAND/FLOOD HUMAN FOOD CHAIN THREAT WASTE CHARACTERISTICS
Erdle Perforating - 11/16/95

Source: 4 SF-1

Source Hazardous Waste Quantity Value: 0.00

Hazardous Substance	Toxicity Value	Persistence Value	Bio-accum. Value	Toxicity/ Persistence/ Bioaccum. Value
Dichloroethylene, trans-1,2-	100	4.00E-01	5.00E+01	2.00E+03

SW PATHWAY: OVERLAND/FLOOD HUMAN FOOD CHAIN THREAT WASTE CHARACTERISTICS
Erdle Perforating - 11/16/95

Source: 5 SF-2

Source Hazardous Waste Quantity Value: 0.00

Hazardous Substance	Toxicity Value	Persistence Value	Bio-accum. Value	Toxicity/ Persistence/ Bioaccum. Value
Dichloroethylene, trans-1,2-	100	4.00E-01	5.00E+01	2.00E+03
Trichloroethylene	10	4.00E-01	5.00E+01	2.00E+02

Hazardous Substances Found in an Observed Release

Sample No.	Observed Release Hazardous Substance	Toxicity Value	Persistence Value	Bio-accum. Value	Toxicity/ Persistence/ Bioaccum. Value

- N/A and/or data not specified

Toxicity/Persistence/Bioaccumulation Value from Source Hazardous Substances:	2.00E+03
Toxicity/Persistence/Bioaccumulation Value from Observed Release Hazardous Substances:	0.00E+00
Toxicity/Persistence/Bioaccumulation Factor:	2.00E+03
Sum of Source Hazardous Waste Quantity Values:	1.66E-02
Hazardous Waste Quantity Factor:	10
Waste Characteristics Factor Category:	10

Level I Concentrations

- N/A and/or data not specified

Level II Concentrations

- N/A and/or data not specified

Most Distant Level I Sample

- N/A and/or data not specified

Most Distant Level II Sample

- N/A and/or data not specified

SW PATHWAY: OVERLAND FLOW/FLOOD COMPONENT HUMAN FOOD CHAIN THREAT TARGETS
Erdle Perforating - 11/16/95

Level I Concentrations

Fishery	Annual Production (pounds)	Human Food Chain Population Value
- N/A and/or data not specified		

Sum of Human Food Chain Population Values: 0.00E+00

Level I Concentrations Factor: 0.00E+00

Level II Concentrations

Fishery	Annual Production (pounds)	Human Food Chain Population Value
- N/A and/or data not specified		

Sum of Human Food Chain Population Values: 0.00E+00

Level II Concentrations Factor: 0.00E+00

SW PATHWAY: OVERLAND FLOW/FLOOD COMPONENT HUMAN FOOD CHAIN THREAT TARGETS
Erdle Perforating - 11/16/95

Potential Contamination

Fishery	Annnual Production (pounds)	Type of Surface Water Body	Average Annual Flow (cfs)	Pop. Value (Pi)	Dilution Weight (Di)	Pi*Di
2 Little Black Creek	1.0	River	2	0.0	1.00E+00	3.00E-02
3 Genesee River	1.0	River	368	0.0	1.00E-02	3.00E-04

Sum of (Pi*Di): 3.03E-02

Potential Human Food Chain Contamination Factor: 3.03E-03

Documentation for Unnamed tributary Fishery:

Production in pounds is not available. Production estimated to be 1 pound per year.

Reference:

Documentation for Little Black Creek Fishery:

Production in pounds is not available. Production estimated to be 1 pound per year.

Reference:

Documentation for Genesee River Fishery:

Production in pounds is not available. Production estimated to be 1 pound per year.

Reference:

Food Chain Individual

Location of Nearest Fishery: Little Black Creek
Distance from the Probable Point of Entry: 0.70 miles
Type of Surface Water Body: River
Dilution Weight: 1.0000000
Level of Contamination: Potential

Food Chain Individual Factor: 20.00

Documentation for Little Black Creek:

Little Black Creek comprises the surface water segment from the mouth of the unnamed tributary to the Genesee River, from miles 0.7 to 4.6. Average flow in Little Black Creek is unknown, but was assumed to be 2 cfs.

Reference: 26, p. 1 of 1

SW PATHWAY: OVERLAND FLOW/FLOOD ENVIRONMENTAL THREAT WASTE CHARACTERISTICS
Erdle Perforating - 11/16/95

Source: 1 TCE UST CONTAM SOIL

Source Hazardous Waste Quantity Value: 0.02

Hazardous Substance	Eco-toxicity Value	Persistence Value	Bio-accum. Value	Ecotoxicity/ Persistence/ Bioaccum. Value
Dichloroethylene, trans-1,2-	1	4.00E-01	5.00E+01	2.00E+01
Tetrachloroethene	100	4.00E-01	5.00E+01	2.00E+03
Trichloroethylene	100	4.00E-01	5.00E+01	2.00E+03

SW PATHWAY: OVERLAND FLOW/FLOOD ENVIRONMENTAL THREAT WASTE CHARACTERISTICS
Erdle Perforating - 11/16/95

Source: 2 SD-2

Source Hazardous Waste Quantity Value: 0.00

Hazardous Substance	Eco-toxicity Value	Persistence Value	Bio-accum. Value	Ecotoxicity/ Persistence/ Bioaccum. Value
Dichloroethylene, trans-1,2-	1	4.00E-01	5.00E+01	2.00E+01
Tetrachloroethene	100	4.00E-01	5.00E+01	2.00E+03
Trichloroethylene	100	4.00E-01	5.00E+01	2.00E+03
Vinyl chloride	0	7.00E-04	5.00E+00	0.00E+00

SW PATHWAY: OVERLAND FLOW/FLOOD ENVIRONMENTAL THREAT WASTE CHARACTERISTICS
Erdle Perforating - 11/16/95

Source: 3 S-1

Source Hazardous Waste Quantity Value: 0.00

Hazardous Substance	Eco-toxicity Value	Persistence Value	Bio-accum. Value	Ecotoxicity/ Persistence/ Bioaccum. Value
Dichloroethylene, trans-1,2-	1	4.00E-01	5.00E+01	2.00E+01
Trichloroethane, 1,1,1-	10	4.00E-01	5.00E+00	2.00E+01
Trichloroethylene	100	4.00E-01	5.00E+01	2.00E+03

SW PATHWAY: OVERLAND FLOW/FLOOD ENVIRONMENTAL THREAT WASTE CHARACTERISTICS
Erdle Perforating - 11/16/95

Source: 4 SF-1

Source Hazardous Waste Quantity Value: 0.00

Hazardous Substance	Eco-toxicity Value	Persistence Value	Bio-accum. Value	Ecotoxicity/ Persistence/ Bioaccum. Value
Dichloroethylene, trans-1,2-	1	4.00E-01	5.00E+01	2.00E+01

SW PATHWAY: OVERLAND FLOW/FLOOD ENVIRONMENTAL THREAT WASTE CHARACTERISTICS
Erdle Perforating - 11/16/95

Source: 5 SF-2

Source Hazardous Waste Quantity Value: 0.00

Hazardous Substance	Eco-toxicity Value	Persistence Value	Bio-accum. Value	Ecotoxicity/ Persistence/ Bioaccum. Value
Dichloroethylene, trans-1,2-	1	4.00E-01	5.00E+01	2.00E+01
Trichloroethylene	100	4.00E-01	5.00E+01	2.00E+03

SW PATHWAY: OVERLAND FLOW/FLOOD ENVIRONMENTAL THREAT WASTE CHARACTERISTICS
Erdle Perforating - 11/16/95

Hazardous Substances Found in an Observed Release

Sample No.	Observed Release Hazardous Substance	Eco-toxicity Value	Persistence Value	Bio-accum. Value	Ecotoxicity/ Persistence/ Bioaccum. Value
- N/A and/or data not specified					

Ecotoxicity/Persistence/Bioaccummulation Value from Source Hazardous Substances:	2.00E+03
Ecotoxicity/Persistence/Bioaccummulation Value from Observed Release Hazardous Substances:	0.00E+00
Ecotoxicity/Persistence/Bioaccummulation Factor:	2.00E+03
Sum of Source Hazardous Waste Quantity Values:	1.66E-02
Hazardous Waste Quantity Factor:	10
Waste Characteristics Factor Category:	10

Level I Concentrations

- N/A and/or data not specified

Level II Concentrations

- N/A and/or data not specified

Most Distant Level I Sample

- N/A and/or data not specified

Most Distant Level II Sample

- N/A and/or data not specified

SW PATHWAY: OVERLAND FLOW/FLOOD COMPONENT ENVIRONMENTAL THREAT TARGETS
Erdle Perforating - 11/16/95

Level I Concentrations

Sensitive Environment	Distance from Probable Point of Entry to Sensitive Env. (miles)	Sensitive Environment Value
- N/A and/or data not specified		

Sum of Sensitive Environments Values: 0

Wetlands

Wetland	Distance from Probable Point of Entry to Wetland (miles)	Wetlands Frontage (miles)
- N/A and/or data not specified		

Total Wetlands Frontage: 0.00 Miles Total Wetlands Value: 0

Sum of Sensitive Environments Value + Wetlands Value: 0.00E+00

Level I Concentrations Factor: 0.00E+00

SW PATHWAY: OVERLAND FLOW/FLOOD COMPONENT ENVIRONMENTAL THREAT TARGETS
Erdle Perforating - 11/16/95

Level II Concentrations

Sensitive Environment	Distance from Probable Point of Entry to Sensitive Env. (miles)	Sensitive Environment Value
- N/A and/or data not specified		

Sum of Sensitive Environments Values: 0

Wetlands

Wetland	Distance from Probable Point of Entry to Wetland (miles)	Wetlands Frontage (miles)
- N/A and/or data not specified		

Total Wetlands Frontage: 0.00 Miles Total Wetlands Value: 0

Sum of Sensitive Environments Value + Wetlands Value: 0.00E+00

Level II Concentrations Factor: 0.00E+00

SW PATHWAY: OVERLAND FLOW/FLOOD COMPONENT ENVIRONMENTAL THREAT TARGETS
Erdle Perforating - 11/16/95

Potential Contamination

Sensitive Environments

Type of Surface Water Body	Sensitive Environment	Sensitive Environment Value
River	6 Little Black Creek	5
River	7 Genesee River	5
River	8 Handsome sedge	50

Wetlands

Type of Surface Water Body	Sensitive Environment	Wetlands Frontage	Wetlands Value
River	1 CI-30	0.24	25
River	2 RH-2	1.00	25
River	3 RH-3	1.16	50
River	4 RH-20	0.84	25

Documentation for Sensitive Environment CI-30:

Wetlands occur 4.00 miles from the PPE.
Wetland frontage = 0.24 mile, as measured with planimeter.

Reference: 26, p. 1 of 1

Documentation for Sensitive Environment RH-2:

Wetlands occur 5.4 miles from the PPE.
Wetland frontage = 1.00 mile, as measured with planimeter.

Reference: 26, p. 1 of 1

Documentation for Sensitive Environment RH-3:

Wetlands occur 5.5 miles from the PPE.
Wetland frontage = 1.16 miles, as measured with planimeter.

Reference: 26, p. 1 of 1

Documentation for Sensitive Environment RH-20:

Wetlands occur 13.6 miles from the PPE.
Wetland frontage = 0.84 mile, as measured with planimeter.

Reference: 26, p. 1 of 1

Documentation for Sensitive Environment Little Black Creek:

Little Black Creek is designated as a Class C and Class B stream within the 15-mile surface water pathway. Little Black Creek is located 0.7 mile from the PPE.
Class C and Class B streams are protected for fish life and fish propagation.
HRS Table 4-23 used to determine sensitive environment value.
State designated areas for the protection of aquatic life = 5.

Reference: 1, p. 1 of 1; 27, pp. 14, 17 & 18 of 18; 28, p. 4 of 5

Documentation for Sensitive Environment Genesee River:

The Genesee River is designated as a Class B stream within the 15-mile downstream surface water pathway. The Genesee River is located 4.6 miles from the PPE.
Class B streams are protected for fish life and fish propagation.
HRS Table 4-23 used to determine sensitive environment value.
State designated areas for the protection of aquatic life = 5.

Reference: 1, p. 1 of 1; 27, pp. 13 & 18 of 18; 28, p. 4 of 5

Documentation for Sensitive Environment Handsome sedge:

The handsome sedge is a candidate for the federal threatened and endangered species list. A handsome sedge habitat is located 13.5 miles downstream from the PPE along the Genesee River.
HRS Table 4-23 was used to determine the sensitive environment value. Habitat known to be used by species under review as to its Federal endangered or threatened status = 50.

Reference: 1, p. 1 of 1; 26, p. 1 of 1; 31, pp. 4 and 6 of 6

SW PATHWAY: OVERLAND FLOW/FLOOD COMPONENT ENVIRONMENTAL THREAT TARGETS
Erdle Perforating - 11/16/95

Type of Surface Water Body	Sum of Sens. Environment Values(Sj)	Sum of Wetland Frontage Values(Wj)	Dilution Weight (Dj)	Dj(Wj+Sj)
Minimal Stream	5	25	1.00E+00	3.00E+01
Moderate to Large Stream	55	75	1.00E-02	1.30E+00

Sum of Dj(Wj+Sj): 3.13E+01
Sum of Dj(Wj+Sj)/10: 3.13E+00

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Potential Contamination Sensitive Environment Factor: 4.00E+00

SURFACE WATER PATHWAY GW TO SW CONTAINMENT SUMMARY
Erdle Perforating - 11/16/95

Containment

No.	Source ID	HWQ Value	Containment Value
1	TCE UST CONTAM SOIL	1.65E-02	10
2	SD-2	2.94E-05	10
3	S-1	2.94E-05	10
4	SF-1	2.94E-05	10
5	SF-2	2.94E-05	10
	Containment Factor		10

Documentation for Ground Water Containment, Source TCE UST CONTAM SOIL:

Based on HRS Table 3-2.
Evidence of hazardous substance migration from source area = 10.
Unvalidated analytical results indicate that groundwater has been impacted by volatile organic compounds.

Reference: 1, p. 1 of 1; 17, pp. 63-66 of 584

Documentation for Ground Water Containment, Source SD-2:

Based on HRS Table 3-2.
No liner = 10.
Source consists of contaminated sediment from an intermittent stream (soil) in an outfall ditch.

Reference: 1, p. 1 of 1; 17, p. 76 of 584

Documentation for Ground Water Containment, Source S-1:

Based on HRS Table 3-2.
No liner = 10.
No evidence of containment of contaminated soils and sediments.

Reference: 1, p. 1 of 1; 3, pp. 1-5 of 5

Documentation for Ground Water Containment, Source SF-1:

Based on HRS Table 3-2.
No liner = 10.
No evidence of containment of contaminated soil/sediment.

Reference: 1, p. 1 of 1; 3, pp. 1-5 of 5

Documentation for Ground Water Containment, Source SF-2:

Based on HRS Table 3-2.
No liner = 10.
No evidence of containment of contaminated soil/sediment.

Reference: 1, p. 1 of 1; 3, pp. 1-5 of 5

Net Precipitation

Net Precipitation (inches)	0.00

Documentation for Net Precipitation:

Based on HRS Figure 3-2. Net precipitation factor = 3.

Reference: 1, p. 1 of 1

SURFACE WATER PATHWAY GW TO SW COMPONENT LIKELIHOOD OF RELEASE
Erdle Perforating - 11/16/95

Aquifer: Overburden

Type of Aquifer: Non Karst

Overlaying Aquifer: 0

Interconnected with: 0

Documentation for Overburden Aquifer:

Groundwater exists in two distinct zones at the site: the overburden and the shallow bedrock. The overburden aquifer is present from 1 to 2 feet below ground surface in the stratified drift and weathered glacial till materials. This aquifer extends to the top of the unweathered glacial till at a depth of approximately 8 to 9 feet below ground surface. The unweathered till is laterally consistent across the site. Groundwater flow in the overburden aquifer is to the south-southeast.

Reference: 17, pp. 38 through 46 of 584

OBSERVED RELEASE

No.	Well ID	Well Type	Distance (miles)	Level of Contamination

- N/A and/or data not specified

Observed Release Factor 0

POTENTIAL TO RELEASE

Ground Water to Surface Water Angle

Probable Point of Entry	-0.10	miles
Angle Theta	119	

Documentation for Ground to Surface Water PPE and Angle Theta:

According to HRS 4.2.1.2, the groundwater to surface water PPE is the straightest line drawn from the sources at the site to the nearest surface water body.

The groundwater to surface water PPE is located approximately 40 ft. (0.008 mile) upstream from the overland flow PPE. Since the groundwater to surface water PPE is located upstream from the overland flow PPE, the value is negative.

The distance between the groundwater to surface water PPE and the overland flow PPE = -0.01 MILE.
Theta calculated following HRS Figure 4-3.
Theta = 119.

Reference: 1, p. 1 of 1; Figure 1; Figure 2

Containment

Containment Factor	10

Net Precipitation

Net Precipitation Factor	1

Depth to Aquifer

A. Depth of Hazardous Substances	7.00	feet

SURFACE WATER PATHWAY GW TO SW COMPONENT LIKELIHOOD OF RELEASE
Erdle Perforating - 11/16/95

Documentation for Depth of Hazardous Substances:

Maximum depth of contamination is 7 feet. This is based on soil sampling conducted during the drilling of MW-1. A soil sample collected from a depth of 5 to 7 feet was found to contain 1,2-dichloroethene, trichloroethene, and total xylenes at concentrations greater than three times background levels. This data is validated and was generated as part of the Radian Corporation RI.

Reference: 17, pp. 47, 48, and 184 through 440 of 584

B. Depth to Aquifer from Surface	0.89	feet

Documentation for Depth to Aquifer from Surface :

MW-1 is the closest monitoring well to the former waste TCE UST, located adjacent to the former tank. The ground surface at this well has an elevation of 557.37 feet. The water level in this well is 556.48 feet. Therefore, the depth to the aquifer is 557.37 - 556.48 = 0.89 feet.

Reference: 17, pp. 44 and 119 of 584

C. Depth to Aquifer (B - A)	0.00	feet
Depth to Aquifer Factor	5	

Travel Time

Are All Layers Karst?	NO

Documentation for Karst Layers:

Karst geology was not identified to be present beneath the site.

Reference: 17, pp. 38 through 46 of 584

Thickness of Layer(s) with Lowest Conductivity	0.00	feet

Documentation for Thickness of Layers with Lowest Conductivity:

Since the overburden (unconfined) aquifer is being evaluated and the water table is less than 1 foot below ground surface, and the lowest known level of contamination is seven feet below ground surface, there are no layers between the lowest known level of contamination and the top of the aquifer.

Reference: 17, pp. 44, 47, 48, 119, and 184 through 440 of 584

Hydraulic Conductivity (cm/sec)	0.0E-00

Documentation for Hydraulic Conductivity:

There is no layer between the lowest known level of waste and the top of the aquifer since the top of the overburden aquifer is less than 1 foot below ground surface. As a result, there is no hydraulic conductivity.

Reference: 17, pp. 44, 47, 48, 119, and 184 through 440 of 584

Travel Time Factor	35

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Potential to Release Factor	410

SW PATHWAY: GW TO SW COMPONENT DRINKING WATER THREAT WASTE CHARACTERISTICS
Erdle Perforating - 11/16/95

Source: 1 TCE UST CONTAM SOIL

Source Hazardous Waste Quantity Value: 0.02

Hazardous Substance	Toxicity Factor Value	Persist. Value	Mobility Value	Toxicity/ Mobililty/ Persistence
Dichloroethylene, trans-1,2-	100	4.00E-01	1.00E+00	4.00E+01
Tetrachloroethene	100	4.00E-01	1.00E-02	4.00E-01
Trichloroethylene	10	4.00E-01	1.00E-02	4.00E-02

SW PATHWAY: GW TO SW COMPONENT DRINKING WATER THREAT WASTE CHARACTERISTICS
Erdle Perforating - 11/16/95

Source: 2 SD-2

Source Hazardous Waste Quantity Value: 0.00

Hazardous Substance	Toxicity Factor Value	Persist. Value	Mobility Value	Toxicity/ Mobilility/ Persistence
Dichloroethylene, trans-1,2-	100	4.00E-01	1.00E+00	4.00E+01
Tetrachloroethene	100	4.00E-01	1.00E-02	4.00E-01
Trichloroethylene	10	4.00E-01	1.00E-02	4.00E-02
Vinyl chloride	10000	7.00E-04	1.00E-02	7.00E-02

SW PATHWAY: GW TO SW COMPONENT DRINKING WATER THREAT WASTE CHARACTERISTICS
Erdle Perforating - 11/16/95

Source: 3 S-1

Source Hazardous Waste Quantity Value: 0.00

Hazardous Substance	Toxicity Factor Value	Persist. Value	Mobility Value	Toxicity/ Mobililty/ Persistence
Dichloroethylene, trans-1,2-	100	4.00E-01	1.00E+00	4.00E+01
Trichloroethane, 1,1,1-	1	4.00E-01	1.00E-02	4.00E-03
Trichloroethylene	10	4.00E-01	1.00E-02	4.00E-02

SW PATHWAY: GW TO SW COMPONENT DRINKING WATER THREAT WASTE CHARACTERISTICS
Erdle Perforating - 11/16/95

Source: 4 SF-1

Source Hazardous Waste Quantity Value: 0.00

Hazardous Substance	Toxicity Factor Value	Persist. Value	Mobility Value	Toxicity/ Mobililty/ Persistence
Dichloroethylene, trans-1,2-	100	4.00E-01	1.00E+00	4.00E+01

SW PATHWAY: GW TO SW COMPONENT DRINKING WATER THREAT WASTE CHARACTERISTICS
Erdle Perforating - 11/16/95

Source: 5 SF-2

Source Hazardous Waste Quantity Value: 0.00

Hazardous Substance	Toxicity Factor Value	Persist. Value	Mobility Value	Toxicity/ Mobililty/ Persistence
Dichloroethylene, trans-1,2-	100	4.00E-01	1.00E+00	4.00E+01
Trichloroethylene	10	4.00E-01	1.00E-02	4.00E-02

SW PATHWAY: GW TO SW COMPONENT DRINKING WATER THREAT WASTE CHARACTERISTICS
Erdle Perforating - 11/16/95

Hazardous Substances Found in an Observed Release

Observed Release Hazardous Substance	Toxicity Factor Value	Persist. Value	Toxicity/ Persistence

- N/A and/or data not specified

Toxicity/Mobility/Persistence Value from Source Hazardous Substances:	4.00E+01
Toxicity/Mobility/Persistence Value from Observed Release Hazardous Substances:	0.00E+00
Toxicity/Mobility/Persistence Factor:	4.00E+01
Sum of Source Hazardous Waste Quantity Values:	1.66E-02
Hazardous Waste Quantity Factor:	10
Waste Characteristics Factor Category:	3

Level I Concentrations

- N/A and/or data not specified

Level II Concentrations

- N/A and/or data not specified

Most Distant Level I Sample

- N/A and/or data not specified

Most Distant Level II Sample

- N/A and/or data not specified

SW PATHWAY: GW TO SW COMPONENT DRINKING WATER THREAT TARGETS
Erdle Perforating - 11/16/95

Level I Concentrations

Intake	Distance Along the In-water Segment from the Probable Point of Entry (miles)	Population
- N/A and/or data not specified		

Population Served by Level I Intakes: 0.0

Level I Population Factor: 0.00E+00

SW PATHWAY: GW TO SW COMPONENT DRINKING WATER THREAT TARGETS
Erdle Perforating - 11/16/95

Level II Concentrations

Intake	Distance Along the In-water Segment from the Probable Point of Entry (miles)	Population
- N/A and/or data not specified		

Population Served by Level II Intakes: 0.0

Level II Population Factor: 0.00E+00

Potential Contamination

Intake ID	Average Annual Flow (cfs)	Population Served
- N/A and/or data not specified		

Type of Surface Water Body	Total Population	Dilution-Weighted Population
- N/A and/or data not specified		

Dilution-Weighted Population Served
by Potentially Contaminated Intakes: 0.0

Potential Contamination Factor: 0.0

Nearest Intake

Location of Nearest Drinking Water Intake: N.A.

Nearest Intake Factor: 0.00

Resources

Resource Use: NO

Resource Value: 0.00E+00

Documentation for Resources:

No resources identified.

Reference:

SW PATHWAY: GW TO SW COMPONENT HUMAM FOOD CHAIN THREAT WASTE CHARACTERISTICS
Erdle Perforating - 11/16/95

Source: 1 TCE UST CONTAM SOIL

Source Hazardous Waste Quantity Value: 0.02

Hazardous Substance	Toxicity Value	Persist. Value	Mobility Value	Bio-accum. Value	Tox./Mobil./ Persistence/ Bioaccum. Value
Dichloroethylene, trans-1,2-	100	4.00E-01	1.00E+00	5.00E+01	2.00E+03
Tetrachloroethene	100	4.00E-01	1.00E-02	5.00E+01	2.00E+01
Trichloroethylene	10	4.00E-01	1.00E-02	5.00E+01	2.00E+00

SW PATHWAY: GW TO SW COMPONENT HUMAM FOOD CHAIN THREAT WASTE CHARACTERISTICS
Erdle Perforating - 11/16/95

Source: 2 SD-2

Source Hazardous Waste Quantity Value: 0.00

Hazardous Substance	Toxicity Value	Persist. Value	Mobility Value	Bio-accum. Value	Tox./Mobil./ Persistence/ Bioaccum. Value
Dichloroethylene, trans-1,2-	100	4.00E-01	1.00E+00	5.00E+01	2.00E+03
Tetrachloroethene	100	4.00E-01	1.00E-02	5.00E+01	2.00E+01
Trichloroethylene	10	4.00E-01	1.00E-02	5.00E+01	2.00E+00
Vinyl chloride	10000	7.00E-04	1.00E-02	5.00E+00	3.50E-01

SW PATHWAY: GW TO SW COMPONENT HUMAM FOOD CHAIN THREAT WASTE CHARACTERISTICS
Erdle Perforating - 11/16/95

Source: 3 S-1

Source Hazardous Waste Quantity Value: 0.00

Hazardous Substance	Toxicity Value	Persist. Value	Mobility Value	Bio-accum. Value	Tox./Mobil./ Persistence/ Bioaccum. Value
Dichloroethylene, trans-1,2-	100	4.00E-01	1.00E+00	5.00E+01	2.00E+03
Trichloroethane, 1,1,1-	1	4.00E-01	1.00E-02	5.00E+00	2.00E-02
Trichloroethylene	10	4.00E-01	1.00E-02	5.00E+01	2.00E+00

SW PATHWAY: GW TO SW COMPONENT HUMAM FOOD CHAIN THREAT WASTE CHARACTERISTICS
Erdle Perforating - 11/16/95

Source: 4 SF-1

Source Hazardous Waste Quantity Value: 0.00

Hazardous Substance	Toxicity Value	Persist. Value	Mobility Value	Bio-accum. Value	Tox./Mobil./ Persistence/ Bioaccum. Value
Dichloroethylene, trans-1,2-	100	4.00E-01	1.00E+00	5.00E+01	2.00E+03

SW PATHWAY: GW TO SW COMPONENT HUMAM FOOD CHAIN THREAT WASTE CHARACTERISTICS
Erdle Perforating - 11/16/95

Source: 5 SF-2

Source Hazardous Waste Quantity Value: 0.00

Hazardous Substance	Toxicity Value	Persist. Value	Mobility Value	Bio-accum. Value	Tox./Mobil./ Persistence/ Bioaccum. Value
Dichloroethylene, trans-1,2-	100	4.00E-01	1.00E+00	5.00E+01	2.00E+03
Trichloroethylene	10	4.00E-01	1.00E-02	5.00E+01	2.00E+00

SW PATHWAY: GW TO SW COMPONENT HUMAM FOOD CHAIN THREAT WASTE CHARACTERISTICS
Erdle Perforating - 11/16/95

Hazardous Substances Found in an Observed Release

Observed Release Hazardous Substance	Toxicity Value	Persist. Value	Bio-accum. Value	Toxicity/ Persistence Bioaccum. Value
- N/A and/or data not specified				

SW PATHWAY: GW TO SW COMPONENT HUMAM FOOD CHAIN THREAT WASTE CHARACTERISTICS
Erdle Perforating - 11/16/95

Toxicity/Mobility/Persistence/Bioaccumulation Value from Source Hazardous Substances:	2.00E+03
Toxicity/Mobility/Persistence/Bioaccumulation Value from Observed Release Hazardous Substances:	0.00E+00
Toxicity/Mobility/Persistence/Bioaccumulation Factor:	2.00E+03
Sum of Source Hazardous Waste Quantity Values:	1.66E-02
Hazardous Waste Quantity Factor:	10
Waste Characteristics Factor Category:	10

Level I Concentrations

- N/A and/or data not specified

Level II Concentrations

- N/A and/or data not specified

Most Distant Level I Sample

- N/A and/or data not specified

Most Distant Level II Sample

- N/A and/or data not specified

SW PATHWAY: GW TO SW COMPONENT HUMAN FOOD CHAIN THREAT TARGETS
Erdle Perforating - 11/16/95

Level I Concentrations

Fishery	Annual Production (pounds)	Human Food Chain Population Value
- N/A and/or data not specified		

Sum of Human Food Chain Population Values: 0.00E+00

Level I Concentrations Factor: 0.00E+00

Level II Concentrations

Fishery	Annual Production (pounds)	Human Food Chain Population Value
- N/A and/or data not specified		

Sum of Human Food Chain Population Values: 0.00E+00

Level II Concentrations Factor: 0.00E+00

SW PATHWAY: GW TO SW COMPONENT HUMAN FOOD CHAIN THREAT TARGETS
Erdle Perforating - 11/16/95

Potential Contamination

Fishery	Annnual Production (pounds)	Type of Surface Water Body	Average Annual Flow (cfs)	Pop. Value (Pi)	Dilution Weight (Di)	Pi*Di
1 Unnamed tributary	1.0	River	0	0.0	3.00E-01	9.00E-03
2 Little Black Creek	1.0	River	2	0.0	3.00E-01	9.00E-03
3 Genesee River	1.0	River	368	0.0	3.00E-03	9.00E-05

Sum of (Pi*Di): 1.81E-02

Potential Human Food Chain Contamination Factor: 1.81E-03

Documentation for Unnamed tributary Fishery:

Production in pounds is not available. Production estimated to be 1 pound per year.

Reference:

Documentation for Little Black Creek Fishery:

Production in pounds is not available. Production estimated to be 1 pound per year.

Reference:

Documentation for Genesee River Fishery:

Production in pounds is not available. Production estimated to be 1 pound per year.

Reference:

Food Chain Individual

Location of Nearest Fishery: Unnamed tributary
Distance from the Probable Point of Entry: -0.10 miles
Type of Surface Water Body: River
Dilution Weight: 0.3000000
Level of Contamination: Potential

Food Chain Individual Factor: 20.00

Documentation for Unnamed tributary:

The unnamed tributary to Little Black Creek comprises the surface water segment from the PPE to 0.7 mile along the 15-mile surface water pathway. Average flow in the tributary is unknown, but was assumed to be less than 1 cfs.

Reference: 26, p. 1 of 1

SW PATHWAY: GW TO SW COMPONENT ENVIRONMENTAL THREAT WASTE CHARACTERISTICS
Erdle Perforating - 11/16/95

Source: 1 TCE UST CONTAM SOIL

Source Hazardous Waste Quantity Value: 0.02

Hazardous Substance	Eco-toxicity Value	Persist. Value	Mob. Value	Bio-accum. Value	Ecotoxicity/ Mobility/ Persistence/ Bioaccum. Value
Dichloroethylene, trans-1,2-	1	4.00E-01	1.00E+00	5.00E+01	2.00E+01
Tetrachloroethene	100	4.00E-01	1.00E-02	5.00E+01	2.00E+01
Trichloroethylene	100	4.00E-01	1.00E-02	5.00E+01	2.00E+01

SW PATHWAY: GW TO SW COMPONENT ENVIRONMENTAL THREAT WASTE CHARACTERISTICS
Erdle Perforating - 11/16/95

Source: 2 SD-2

Source Hazardous Waste Quantity Value: 0.00

Hazardous Substance	Eco-toxicity Value	Persist. Value	Mob. Value	Bio-accum. Value	Ecotoxicity/ Mobility/ Persistence/ Bioaccum. Value
Dichloroethylene, trans-1,2-	1	4.00E-01	1.00E+00	5.00E+01	2.00E+01
Tetrachloroethene	100	4.00E-01	1.00E-02	5.00E+01	2.00E+01
Trichloroethylene	100	4.00E-01	1.00E-02	5.00E+01	2.00E+01
Vinyl chloride	0	7.00E-04	1.00E-02	5.00E+00	0.00E+00

SW PATHWAY: GW TO SW COMPONENT ENVIRONMENTAL THREAT WASTE CHARACTERISTICS
Erdle Perforating - 11/16/95

Source: 3 S-1

Source Hazardous Waste Quantity Value: 0.00

Hazardous Substance	Eco-toxicity Value	Persist. Value	Mob. Value	Bio-accum. Value	Ecotoxicity/ Mobility/ Persistence/ Bioaccum. Value
Dichloroethylene, trans-1,2-	1	4.00E-01	1.00E+00	5.00E+01	2.00E+01
Trichloroethane, 1,1,1-	10	4.00E-01	1.00E-02	5.00E+00	2.00E-01
Trichloroethylene	100	4.00E-01	1.00E-02	5.00E+01	2.00E+01

SW PATHWAY: GW TO SW COMPONENT ENVIRONMENTAL THREAT WASTE CHARACTERISTICS
Erdle Perforating - 11/16/95

Source: 4 SF-1

Source Hazardous Waste Quantity Value: 0.00

Hazardous Substance	Eco-toxicity Value	Persist. Value	Mob. Value	Bio-accum. Value	Ecotoxicity/ Mobility/ Persistence/ Bioaccum. Value
Dichloroethylene, trans-1,2-	1	4.00E-01	1.00E+00	5.00E+01	2.00E+01

SW PATHWAY: GW TO SW COMPONENT ENVIRONMENTAL THREAT WASTE CHARACTERISTICS
Erdle Perforating - 11/16/95

Source: 5 SF-2

Source Hazardous Waste Quantity Value: 0.00

Hazardous Substance	Eco-toxicity Value	Persist. Value	Mob. Value	Bio-accum. Value	Ecotoxicity/ Mobility/ Persistence/ Bioaccum. Value
Dichloroethylene, trans-1,2-	1	4.00E-01	1.00E+00	5.00E+01	2.00E+01
Trichloroethylene	100	4.00E-01	1.00E-02	5.00E+01	2.00E+01

SW PATHWAY: GW TO SW COMPONENT ENVIRONMENTAL THREAT WASTE CHARACTERISTICS
Erdle Perforating - 11/16/95

Hazardous Substances Found in an Observed Release

Observed Release Hazardous Substance	Eco-toxicity Value	Persist. Value	Bio-accum. Value	Ecotoxicity/ Persistence/ Bioaccum. Value
- N/A and/or data not specified				

SW PATHWAY: GW TO SW COMPONENT ENVIRONMENTAL THREAT WASTE CHARACTERISTICS
Erdle Perforating - 11/16/95

Ecotoxicity/Mobility/Persistence/Bioaccummulation Value from Source Substances:	2.00E+01
Ecotoxicity/Mobility/Persistence/Bioaccummulation Value from Observed Hazardous Substances:	0.00E+00
Ecotoxicity/Mobility/Persistence/Bioaccummulation Factor:	2.00E+01
Sum of Source Hazardous Waste Quantity Values:	1.66E-02
Hazardous Waste Quantity Factor:	10
Waste Characteristics Factor Category:	3

Level I Concentrations

- N/A and/or data not specified

Level II Concentrations

- N/A and/or data not specified

Most Distant Level I Sample

- N/A and/or data not specified

Most Distant Level II Sample

- N/A and/or data not specified

SW PATHWAY: GW TO SW COMPONENT ENVIRONMENTAL THREAT TARGETS
Erdle Perforating - 11/16/95

Level I Concentrations

Sensitive Environment	Distance from Probable Point of Entry to Sensitive Env. (miles)	Sensitive Environment Value
- N/A and/or data not specified		

Sum of Sensitive Environments Values: 0

Wetlands

Wetland	Distance from Probable Point of Entry to Wetland (miles)	Wetlands Frontage (miles)
- N/A and/or data not specified		

Total Wetlands Frontage: 0.00 Miles Total Wetlands Value: 0

Sum of Sensitive Environments Value + Wetlands Value: 0.00E+00

Level I Concentrations Factor: 0.00E+00

SW PATHWAY: GW TO SW COMPONENT ENVIRONMENTAL THREAT TARGETS
Erdle Perforating - 11/16/95

Level II Concentrations

Sensitive Environment	Distance from Probable Point of Entry to Sensitive Env. (miles)	Sensitive Environment Value
- N/A and/or data not specified		

Sum of Sensitive Environments Values: 0

Wetlands

Wetland	Distance from Probable Point of Entry to Wetland (miles)	Wetlands Frontage (miles)
- N/A and/or data not specified		

Total Wetlands Frontage: 0.00 Miles Total Wetlands Value: 0

Sum of Sensitive Environments Value + Wetlands Value: 0.00E+00

Level II Concentrations Factor: 0.00E+00

SW PATHWAY: GW TO SW COMPONENT ENVIRONMENTAL THREAT TARGETS
Erdle Perforating - 11/16/95

Potential Contamination

Sensitive Environments

Type of Surface Water Body	Sensitive Environment	Sensitive Environment Value
River	5 Unnamed Tributary	5
River	6 Little Black Creek	5
River	7 Genesee River	5
River	8 Handsome sedge	50

Wetlands

Type of Surface Water Body	Sensitive Environment	Wetlands Frontage	Wetlands Value
River	1 CI-30	0.24	25
River	2 RH-2	1.00	25
River	3 RH-3	1.16	50
River	4 RH-20	0.84	25

Documentation for Sensitive Environment CI-30:

Wetlands occur 4.00 miles from the PPE.
Wetland frontage = 0.24 mile, as measured with planimeter.

Reference: 26, p. 1 of 1

Documentation for Sensitive Environment RH-2:

Wetlands occur 5.4 miles from the PPE.
Wetland frontage = 1.00 mile, as measured with planimeter.

Reference: 26, p. 1 of 1

Documentation for Sensitive Environment RH-3:

Wetlands occur 5.5 miles from the PPE.
Wetland frontage = 1.16 miles, as measured with planimeter.

Reference: 26, p. 1 of 1

Documentation for Sensitive Environment RH-20:

Wetlands occur 13.6 miles from the PPE.
Wetland frontage = 0.84 mile, as measured with planimeter.

Reference: 26, p. 1 of 1

Documentation for Sensitive Environment Unnamed Tributary:

The Unnamed Tributary to Little Black Creek is designated as a Class C stream adjacent to the site.
Class C streams are protected for fish life and fish propagation.
HRS Table 4-23 used to determine sensitive environment value.
State designated areas for the protection of aquatic life = 5.

Reference: 1, p. 1 of 1; 27, pp. 14 & 17 of 18; 28, p. 4 of 5

Documentation for Sensitive Environment Little Black Creek:

Little Black Creek is designated as a Class C and Class B stream within the 15-mile surface water pathway. Little Black Creek is located 0.7 mile from the PPE.
Class C and Class B streams are protected for fish life and fish propagation.
HRS Table 4-23 used to determine sensitive environment value. State designated areas for the protection of aquatic life = 5.

Reference: 1, p. 1 of 1; 27, pp. 14, 17 & 18 of 18; 28, p. 4 of 5

Documentation for Sensitive Environment Genesee River:

The Genesee River is designated as a Class B stream within the 15-mile downstream surface water pathway. The Genesee River is located 4.6 miles from the PPE.
Class B streams are protected for fish life and fish propagation.
HRS Table 4-23 used to determine sensitive environment value. State designated areas for the protection of aquatic life = 5.

Reference: 1, p. 1 of 1; 27, pp. 13 & 18 of 18; 28, p. 4 of 5

Documentation for Sensitive Environment Handsome sedge:

The handsome sedge is a candidate for the federal threatened and endangered species list. A handsome sedge habitat is located 13.5 miles downstream from the PPE along the Genesee River.
HRS Table 4-23 was used to determine the sensitive environment value. Habitat known to be used by species under review as to its Federal endangered or threatened status = 50.

Reference: 1, p. 1 of 1; 26, p. 1 of 1; 31, pp. 4 and 6 of 6

SW PATHWAY: GW TO SW COMPONENT ENVIRONMENTAL THREAT TARGETS

Erdle Perforating - 11/16/95

Type of Surface Water Body	Sum of Sens. Environment Values(Sj)	Sum of Wetland Frontage Values(Wj)	Dilution Weight (Dj)	Dj(Wj+Sj)
Minimal Stream	10	25	3.00E-01	1.05E+01
Moderate to Large Stream	55	75	3.00E-03	3.90E-01

Sum of Dj(Wj+Sj): 1.09E+01

Sum of Dj(Wj+Sj)/10: 1.09E+00

Potential Contamination Sensitive Environment Factor: 1.00E+00

SOIL EXPOSURE PATHWAY RESIDENT POPULATION THREAT LIKELIHOOD OF EXPOSURE
Erdle Perforating - 11/16/95

Likelihood of Exposure

No.	Source ID	Level of Contamination
2	SD-2	Level II
3	S-1	Level II
4	SF-1	Level II

Likelihood of Exposure Factor: 550

Documentation for Area of Contamination, Source TCE UST CONTAM SOIL:

Area of contamination calculated from surface area of walls and floor of excavation which indicated contaminant concentrations at levels greater than three times background.

Area of entire floor = 230 sq. ft.
Area of entire west wall = 95 sq. ft.
Area of entire east wall to a depth of 5 ft. = 73 sq. ft. (A 5 foot depth was used because the background sample (Sample E) is located at 5 ft.)
Area of entire south wall = 163 sq. ft.

Reference: 9, pp. 15 and 16 of 57

Documentation for Area of Contamination, Source SD-2:

Contaminated area associated with SD-2 is unknown. An area of contamination of 1 sq. ft. was estimated.

Reference:

SOIL EXPOSURE PATHWAY RESIDENT POPULATION THREAT LIKELIHOOD OF EXPOSURE
Erdle Perforating - 11/16/95

Documentation for Area of Contamination, Source S-1:

Contaminated soil area unknown, but estimated to be 1 sq. ft.

Reference:

Documentation for Area of Contamination, Source SF-1:

Contaminated soil area unknown, but estimated to be 1 sq. ft.

Reference:

Documentation for Area of Contamination, Source SF-2:

Contaminated soil area unknown, but estimated to be 1 sq. ft.

Reference:

Source No.	Hazardous Substance	Depth (ft.)	Concent.	Cancer	RFD	Units
2	Dichloroethylene, trans-1,2-	< 2	1.0E+01	0.0E+00	1.2E+04	ppm
2	Tetrachloroethene	< 2	3.9E-02	1.1E+01	5.8E+03	ppm
2	Trichloroethylene	< 2	1.6E-01	5.3E+01	0.0E+00	ppm
2	Vinyl chloride	< 2	4.8E-02	3.1E-01	0.0E+00	ppm
3	Dichloroethylene, trans-1,2-	< 2	1.0E-01	0.0E+00	1.2E+04	ppm
3	Trichloroethane, 1,1,1-	< 2	2.4E-02	0.0E+00	0.0E+00	ppm
3	Trichloroethylene	< 2	3.2E-02	5.3E+01	0.0E+00	ppm
4	Dichloroethylene, trans-1,2-	< 2	6.6E-02	0.0E+00	1.2E+04	ppm

SOIL EXPOSURE PATHWAY RESIDENT POPULATION THREAT LIKELIHOOD OF EXPOSURE
Erdle Perforating - 11/16/95

Documentation for Source TCE UST CONTAM SOIL, Contaminants:

Soil samples collected from the excavation pit of a TCE underground storage tank indicated the presence of contamination of organic solvents. Contaminants in the soil were caused by leakage from the tank.

Sample Location E was utilized as background because it contained the lowest volatile organic concentrations and no soil sample was collected from outside the excavation to use as background. TCE and PCE were undetectable in E; 1,2-DCE was detected at 0.66 ppm.

Sample Locations D, F-K, and M-P were contaminated with TCE at concentrations greater than three times background levels. TCE concentrations ranged from 0.053 to 6,618 ppm.

Sample Location D, G, H, J, and L-O were contaminated with 1,2-DCE at concentrations greater than three times background levels. 1,2-DCE concentrations ranged from 2.4 to 354 ppm.

Sample Locations D, F-H, J, O, and P were contaminated with tetrachloroethene (PCE) at concentrations greater than three times background levels. PCE concentrations ranged from 0.091 to 600 ppm.

Sample Location O contained the highest level of contamination of volatile organics.

Analytical data are not validated. Quantitation limits for this sample are 50 ppb (ug/kg).

Reference: 9, pp. 13 through 17 and 28 through 39 of 57

Documentation for Source SD-2, Contaminants:

Based on validated analytical results of samples collected by Radian Engineering in December 1994.

The intermittent stream sediment sample (SD-2) was evaluated as a soil sample. Several volatile organics were detected in SD-2 at concentrations greater than three times background levels. 1,2-Dichloroethene was detected at 10,000D ppb, tetrachloroethene was detected at 39 ppb, trichloroethene was detected at 160 ppb, and vinyl chloride was detected at 48 ppb. Vinyl chloride and tetrachloroethene concentrations were flagged as "J" values during validation because the holding time was exceeded. However, these data were used to evaluate this source because there was no laboratory flag.

Soil sample SF-5 was designated as the upgradient background soil sample. No volatile organic compounds were detected at this location.

Reference: 17, pp. 49, 74, 76, 208-210, and 274 of 584

Documentation for Source S-1, Contaminants:

Based on validated analytical data collected by Radian in December 1994 S-1 was found to be contaminated with several volatile organic compounds. S-1 contained 24 ppb trichloroethane, 100 ppb 1,2-DCE, and 32 ppb TCE at concentrations greater than three times background levels.

SF-5 was designated as the background sample because of its location upgradient and away from sources. No volatile organics were detected in SF-5.

Reference: 17, pp. 47, 49, 206-207, and 274 of 584

Documentation for Source SF-1, Contaminants:

Based on validated analytical data from soil samples collected by Radian in December 1994. SF-1 was found to contain 66 ppb of 1,2-DCE at concentrations greater than three times background levels.

SF-5 was designated as the background sample because of its upgradient location away from sources. No volatile organics were detected in SF-5.

Reference: 17, pp. 47, 49, 213-214, and 274 of 584

Documentation for Source SF-2, Contaminants:

Based on validated analytical results from subsurface soil samples collected by Radian in December 1994. SF-2 was found to be contaminated with 51,000D ppb 1,2-DCE and 2,800 ppb TCE at concentrations greater than three times background levels.

SF-4 was designated as the background subsurface sample because of its upgradient location away from other sources. No 1,2-DCE or TCE was detected in SF-4.

SF-2 and SF-4 were sampled from the 5-7 foot intervals.

Reference: 17, pp. 47, 48, 50, 215-222, and 273 of 584

SOIL EXPOSURE PATHWAY RESIDENT POPULATION THREAT WASTE CHARACTERISTICS
Erdle Perforating - 11/16/95

Source: 2 SD-2

Source Hazardous Waste Quantity Value: 0.00

Hazardous Substance	Toxicity Value
Dichloroethylene, trans-1,2-	100
Tetrachloroethene	100
Trichloroethylene	10
Vinyl chloride	10000

SOIL EXPOSURE PATHWAY RESIDENT POPULATION THREAT WASTE CHARACTERISTICS
Erdle Perforating - 11/16/95

Source: 3 S-1

Source Hazardous Waste Quantity Value: 0.00

Hazardous Substance	Toxicity Value
Dichloroethylene, trans-1,2-	100
Trichloroethane, 1,1,1-	1
Trichloroethylene	10

SOIL EXPOSURE PATHWAY RESIDENT POPULATION THREAT WASTE CHARACTERISTICS
Erdle Perforating - 11/16/95

Source: 4 SF-1

Source Hazardous Waste Quantity Value: 0.00

Hazardous Substance	Toxicity Value
Dichloroethylene, trans-1,2-	100

SOIL EXPOSURE PATHWAY RESIDENT POPULATION THREAT WASTE CHARACTERISTICS

Erdle Perforating - 11/16/95

Toxicity Factor:	1.00E+04
Sum of Source Hazardous Waste Quantity Values:	8.82E-05
Hazardous Waste Quantity Factor:	10
Waste Characteristics Factor Category:	18

SOIL EXPOSURE PATHWAY RESIDENT POPULATION THREAT TARGETS
Erdle Perforating - 11/16/95

Targets

Level I Population: 0.0 Value: 0.00

Documentation for Level I Population:

There are no residences, schools, or day care centers on the site or within 200 feet.

Reference: Figure 1; 3, p. 4 of 5

Level II Population: 0.0 Value: 0.00

Documentation for Level II Population:

There are no residences, schools, or day care centers on the site or within 200 feet.

Reference: Figure 1; 3, p. 4 of 5

Workers: 60.0 Value: 5.00

Documentation for Workers:

There are 60 workers at the site.

Reference: 3, p. 3 of 5

Resident Individual: Potentia Value: 0.00

Resources: NO Value: 0.00

Documentation for Resources:

There is no commercial agriculture, silviculture, or livestock grazing on the site. The site is a private industrial site.

Reference: 3, pp. 1-5 of 5

Terrestial Sensitive Environment	Value
- N/A and/or data not specified	

Terrestrial Sensitive Environments Factor: 0.00

Documentation for Terrestrial Environment :

Based on HRS Table 5-5, there are no terrestrial sensitive environments on the site.

Reference: 1, p. 1 of 1; 3, pp. 1-5 of 5

SOIL EXPOSURE PATHWAY NEARBY POPULATION THREAT LIKELIHOOD OF EXPOSURE
Erdle Perforating - 11/16/95

Likelihood of Exposure

No.	Source ID	Level of Contamination	Attractiveness/ Accessibility	Area of Contam. (sq. feet)
2	SD-2	Level II	10	1
3	S-1	Level II	10	1
4	SF-1	Level II	10	1

Highest Attractiveness/Accessibility Value: 10
Sum of Eligible Areas Of Contamination (sq. feet): 3
Area of Contamination Value: 5

Likelihood of Exposure Factor Category: 5

Documentation for Attractiveness/Accessibility, Source TCE UST CONTAM SOIL:

Based on HRS Table 5-6, site is accessible to the public, but there is no evidence of recreational use = 10.

Reference: 1, p. 1 of 1; 3, p. 4 of 5; 17, p. 11 of 584

Documentation for Attractiveness/Accessibility, Source SD-2:

Based on HRS Table 5-6.
Site is accessible to the public, but there is no evidence of recreational use = 10.

Reference: 1, p. 1 of 1; 3, p. 4 of 5; 17, p. 11 of 584

Documentation for Attractiveness/Accessibility, Source S-1:

Based on HRS Table 5-6.
Site is accessible to the public, but there is no evidence of recreational use = 10.

Reference: 1, p. 1 of 1; 3, p. 4 of 5; 17, p. 11 of 584

SOIL EXPOSURE PATHWAY NEARBY POPULATION THREAT LIKELIHOOD OF EXPOSURE
Erdle Perforating - 11/16/95

Documentation for Attractiveness/Accessibility, Source SF-1:

Based on HRS Table 5-6.
Site is accessible to the public, but there is no evidence of recreational use = 10.

Reference: 1, p. 1 of 1; 3, p. 4 of 5; 17, p. 11 of 584

Documentation for Attractiveness/Accessibility, Source SF-2:

Based on HRS Table 5-6.
Site is accessible, but there is no evidence of recreational use = 10.

Reference: 1, p. 1 of 1; 3, p. 4 of 5; 17, p. 11 0f 584

Source No.	Hazardous Substance	Depth (ft.)	Concent.	Cancer	RFD	Units
2	Dichloroethylene, trans-1,2-	< 2	1.0E+01	0.0E+00	1.2E+04	ppm
2	Tetrachloroethene	< 2	3.9E-02	1.1E+01	5.8E+03	ppm
2	Trichloroethylene	< 2	1.6E-01	5.3E+01	0.0E+00	ppm
2	Vinyl chloride	< 2	4.8E-02	3.1E-01	0.0E+00	ppm
3	Dichloroethylene, trans-1,2-	< 2	1.0E-01	0.0E+00	1.2E+04	ppm
3	Trichloroethane, 1,1,1-	< 2	2.4E-02	0.0E+00	0.0E+00	ppm
3	Trichloroethylene	< 2	3.2E-02	5.3E+01	0.0E+00	ppm
4	Dichloroethylene, trans-1,2-	< 2	6.6E-02	0.0E+00	1.2E+04	ppm

Documentation for Source TCE UST CONTAM SOIL, Contaminants:

Soil samples collected from the excavation pit of a TCE underground storage tank indicated the presence of contamination of organic solvents. Contaminants in the soil were caused by leakage from the tank.

Sample Location E was utilized as background because it contained the lowest volatile organic concentrations and no soil sample was collected from outside the excavation to use as background. TCE and PCE were undetectable in E; 1,2-DCE was detected at 0.66 ppm.

Sample Locations D, F-K, and M-P were contaminated with TCE at

concentrations greater than three times background levels. TCE concentrations ranged from 0.053 to 6,618 ppm.

Sample Location D, G, H, J, and L-O were contaminated with 1,2-DCE at concentrations greater than three times background levels. 1,2-DCE concentrations ranged from 2.4 to 354 ppm.

Sample Locations D, F-H, J, O, and P were contaminated with tetrachloroethene (PCE) at concentrations greater than three times background levels. PCE concentrations ranged from 0.091 to 600 ppm.

Sample Location O contained the highest level of contamination of volatile organics.

Analytical data are not validated. Quantitation limits for this sample are 50 ppb (ug/kg).

Reference: 9, pp. 13 through 17 and 28 through 39 of 57

Documentation for Source SD-2, Contaminants:

Based on validated analytical results of samples collected by Radian Engineering in December 1994.

The intermittent stream sediment sample (SD-2) was evaluated as a soil sample. Several volatile organics were detected in SD-2 at concentrations greater than three times background levels. 1,2-Dichloroethene was detected at 10,000D ppb, tetrachloroethene was detected at 39 ppb, trichloroethene was detected at 160 ppb, and vinyl chloride was detected at 48 ppb. Vinyl chloride and tetrachloroethene concentrations were flagged as "J" values during validation because the holding time was exceeded. However, these data were used to evaluate this source because there was no laboratory flag.

Soil sample SF-5 was designated as the upgradient background soil sample. No volatile organic compounds were detected at this location.

Reference: 17, pp. 49, 74, 76, 208-210, and 274 of 584

Documentation for Source S-1, Contaminants:

Based on validated analytical data collected by Radian in December 1994 S-1 was found to be contaminated with several volatile organic compounds. S-1 contained 24 ppb trichloroethane, 100 ppb 1,2-DCE, and 32 ppb TCE at concentrations greater than three times background levels.

SF-5 was designated as the background sample because of its location upgradient and away from sources. No volatile organics were detected in SF-5.

Reference: 17, pp. 47, 49, 206-207, and 274 of 584

Documentation for Source SF-1, Contaminants:

Based on validated analytical data from soil samples collected by Radian in December 1994. SF-1 was found to contain 66 ppb of 1,2-DCE at concentrations greater than three times background levels.

SF-5 was designated as the background sample because of its upgradient location away from sources. No volatile organics were detected in SF-5.

Reference: 17, pp. 47, 49, 213-214, and 274 of 584

Documentation for Source SF-2, Contaminants:

Based on validated analytical results from subsurface soil samples collected by Radian in December 1994. SF-2 was found to be contaminated with 51,000D ppb 1,2-DCE and 2,800 ppb TCE at concentrations greater than three times background levels.

SF-4 was designated as the background subsurface sample because of its upgradient location away from other sources. No 1,2-DCE or TCE was detected in SF-4.

SF-2 and SF-4 were sampled from the 5-7 foot intervals.

Reference: 17, pp. 47, 48, 50, 215-222, and 273 of 584

SOIL EXPOSURE PATHWAY NEARBY POPULATION THREAT WASTE CHARACTERISTICS
Erdle Perforating - 11/16/95

Source: 2 SD-2

Source Hazardous Waste Quantity Value: 0.00

Hazardous Substance	Toxicity Value
Dichloroethylene, trans-1,2-	100
Tetrachloroethene	100
Trichloroethylene	10
Vinyl chloride	10000

SOIL EXPOSURE PATHWAY NEARBY POPULATION THREAT WASTE CHARACTERISTICS

Erdle Perforating - 11/16/95

Source: 3 S-1

Source Hazardous Waste Quantity Value: 0.00

Hazardous Substance	Toxicity Value
Dichloroethylene, trans-1,2-	100
Trichloroethane, 1,1,1-	1
Trichloroethylene	10

SOIL EXPOSURE PATHWAY NEARBY POPULATION THREAT WASTE CHARACTERISTICS
Erdle Perforating - 11/16/95

Source: 4 SF-1

Source Hazardous Waste Quantity Value: 0.00

Hazardous Substance	Toxicity Value
Dichloroethylene, trans-1,2-	100

SOIL EXPOSURE PATHWAY NEARBY POPULATION THREAT WASTE CHARACTERISTICS

Erdle Perforating - 11/16/95

Toxicity Factor:	1.00E+04
Sum of Source Hazardous Waste Quantity Values:	8.82E-05
Hazardous Waste Quantity Factor:	10
Waste Characteristics Factor Category:	18

SOIL EXPOSURE PATHWAY NEARBY POPULATION THREAT TARGETS
Erdle Perforating - 11/16/95

Nearby Individual

Population within 1/4 mile: 190.0

Nearby Individual Value: 1.0

Population Within 1 Mile

Travel Distance Category	Number of People	Value
> 0 to 1/4 mile	190.0	0.4
> 1/4 to 1/2 mile	576.0	0.7
> 1/2 to 1 mile	3532.0	3.3
	Population Within 1 Mile Factor:	4.0

Documentation for Population > 0 to 1/4 mile Distance Category:

Population determined using population from 1990 census data by Frost Associates.

Reference: 19, p. 13 of 13

Documentation for Population > 1/4 to 1/2 mile Distance Category:

Population determined using population from 1990 census data by Frost Associates.

Reference: 19, p. 13 of 13

SOIL EXPOSURE PATHWAY NEARBY POPULATION THREAT TARGETS
Erdle Perforating - 11/16/95

Documentation for Population > 1/2 to 1 mile Distance Category:

Population determined using population from 1990 census data by Frost Associates.

Reference: 19, p. 12 of 13

AIR PATHWAY LIKELIHOOD OF RELEASE
Erdle Perforating - 11/16/95

OBSERVED RELEASE

No.	Sample ID	Distance (miles)	Level of Contamination

- N/A and/or data not specified

Observed Release Factor: 0

AIR PATHWAY LIKELIHOOD OF RELEASE
Erdle Perforating - 11/16/95

Gas Migration Potential

GAS POTENTIAL TO RELEASE

Source ID	Source Type	Gas Contain. Value (A)	Gas Source Type Value (B)	Gas Migrtn. Potent. Value (C)	Sum (B+C)	Gas Potential to Rel. Value A(B+C)
TCE UST CONTAM SOIL	Contaminated Soil	10	19	17	36	360
SD-2	Contaminated Soil	10	19	17	36	360
S-1	Contaminated Soil	10	19	17	36	360
SF-1	Contaminated Soil	10	19	17	36	360
SF-2	Contaminated Soil	10	19	17	36	360

Gas Potential to Release Factor: 360

Documentation for Gas Containment, Source TCE UST CONTAM SOIL:

Based on HRS Table 6-3.
Contaminated soils were observed from 0 to 1 foot below ground surface. Although site is vegetated with little exposed soil, there is no uncontaminated soil cover. Cover soil is also medium- to coarse-grained, unsaturated, and unresistant to gas migration. As a result, containment factor = 10.

Reference: 1, p. 1 of 1; 17, pp. 11, 18, and 46-51 of 584

Documentation for Source Type, Source TCE UST CONTAM SOIL:

Source consists of contaminated soil associated with a TCE UST excavation. Analytical results indicated contaminated soil was present in the walls and floor of the excavation.

Reference: 9, pp. 14-16 of 57

Documentation for Secondary Source Type, TCE UST CONTAM SOIL:

There were no secondary sources associated with the contaminated soil.

Reference: 9, pp. 13 and 17 of 57

Documentation for Gas Containment, Source SD-2:

Based on HRS Table 6-3.
All situations except those specifically listed = 10.
Source consists of contaminated surface soil (intermittent stream sediment).

Reference: 1, p. 1 of 1; 3, pp. 1-5 of 5; 17, p. 76 of 584

Documentation for Source Type, Source SD-2:

Sampling performed by Radian Engineering in December 1994 indicated contaminants were present in a sediment sample from an intermittent surface water body on the site at concentrations greater than three times background levels. The intermittent sediment sample was evaluated as a soil sample.

Reference: 17, pp. 74 and 76 of 584

Documentation for Secondary Source Type, SD-2:

No secondary sources were found to be associated with SD-2.

Reference: 17, p. 32 of 584

Documentation for Gas Containment, Source S-1:

Based on HRS Table 6-3.
All situations except those specifically listed = 10.
Source consists of contaminated surface soil.

Reference: 1, p. 1 of 1; 3, pp. 1-5 of 5; 17, p. 49 of 584

Documentation for Source Type, Source S-1:

Based on validated analytical results from the RI by Radian, S-1 was found to be contaminated with volatile organic compounds at concentrations greater than three times background levels.

Reference: 17, pp. 47 and 49 of 584

Documentation for Secondary Source Type, S-1:

No secondary sources were reported to be associated with this source.

Reference: 17, pp. 47 and 49 of 584

Documentation for Gas Containment, Source SF-1:

Based on HRS Table 6-3.
All situations except those specifically listed = 10.
Source consists of contaminated surface soil.

Reference: 1, p. 1 of 1; 3, pp. 1-5 of 5; 17, p. 49 of 584

Documentation for Source Type, Source SF-1:

Based on validated analytical data from the RI, SF-1 was found to be contaminated with volatile organic compounds at concentrations greater than three times background values.

Reference: 17, pp. 47 and 49 of 584

Documentation for Secondary Source Type, SF-1:

No secondary sources were found to be associated with this sample location.

Reference: 17, pp. 47 and 49 of 584

Documentation for Gas Containment, Source SF-2:

Based on HRS Table 6-3.
All situations except those specifically listed = 10.
Source consists of contaminated subsurface soil with contaminated soil at the surface.

Reference: 1, p. 1 of 1; 17, pp. 47-50 of 584

Documentation for Source Type, Source SF-2:

Based on validated analytical results from the RI, subsurface soil at SF-2 was found to be contaminated with volatile organic compounds at concentrations greater than three times background levels.

Reference: 17, pp. 47, 48, and 50 of 584

Documentation for Secondary Source Type, SF-2:

No secondary sources were found to be associated with this location.

Reference: 17, pp. 47 and 50 of 584

AIR PATHWAY LIKELIHOOD OF RELEASE
Erdle Perforating - 11/16/95

Source: TCE UST CONTAM SOIL

Gaseous Hazardous Substance	Hazardous Substance Gas Migration Potential Value
Dichloroethylene, trans-1,2-	17
Tetrachloroethene	17
Trichloroethylene	17

Average of Gas Migration Potential Value for 3 Hazardous Substances: 17.000

Gas Migration Potential Value From Table 6-7: 17

AIR PATHWAY LIKELIHOOD OF RELEASE
Erdle Perforating - 11/16/95

Source: SD-2

Gaseous Hazardous Substance	Hazardous Substance Gas Migration Potential Value
Dichloroethylene, trans-1,2-	17
Tetrachloroethene	17
Trichloroethylene	17
Vinyl chloride	17

Average of Gas Migration Potential Value for 3 Hazardous Substances: 17.000

Gas Migration Potential Value From Table 6-7: 17

Source: S-1

Gaseous Hazardous Substance	Hazardous Substance Gas Migration Potential Value
Dichloroethylene, trans-1,2-	17
Trichloroethane, 1,1,1-	17
Trichloroethylene	17

Average of Gas Migration Potential Value for 3 Hazardous Substances: 17.000

Gas Migration Potential Value From Table 6-7: 17

Source: SF-1

Gaseous Hazardous Substance	Hazardous Substance Gas Migration Potential Value
Dichloroethylene, trans-1,2-	17

Average of Gas Migration Potential Value for 3 Hazardous Substances: 17.000

Gas Migration Potential Value From Table 6-7: 17

AIR PATHWAY LIKELIHOOD OF RELEASE
Erdle Perforating - 11/16/95

Source: SF-2

Gaseous Hazardous Substance	Hazardous Substance Gas Migration Potential Value
Dichloroethylene, trans-1,2-	17
Trichloroethylene	17

Average of Gas Migration Potential Value for 3 Hazardous Substances: 17.000

Gas Migration Potential Value From Table 6-7: 17

Particulate Migration Potential

PARTICULATE POTENTIAL TO RELEASE

Source ID	Source Type	Partic. Contain. Value (A)	Partic. Source Type Value (B)	Partic. Migrtn. Potent. Value (C)	Sum (B+C)	Partic. Potential to Rel. Value A(B+C)
- N/A and/or data not specified						

Particulate Potential to Release Factor: 0

Documentation for Particulate Containment, Source TCE UST CONTAM SOIL:

Based on HRS Table 6-9.
Contaminated soils were observed from 0 to 1 foot below ground surface. Although site is vegetated with little exposed soil, soil cover is medium- to coarse-grained, unsaturated, and unresistant to gas migration. As a result, containment factor = 10.

Reference: 1, p. 1 of 1; 17, pp. 11, 18, and 46-51 of 584

Documentation for Source Type, Source TCE UST CONTAM SOIL:

Source consists of contaminated soil associated with a TCE UST excavation. Analytical results indicated contaminated soil was present in the walls and floor of the excavation.

Reference: 9, pp. 14-16 of 57

Documentation for Secondary Source Type, TCE UST CONTAM SOIL:

There were no secondary sources associated with the contaminated soil.

Reference: 9, pp. 13 and 17 of 57

Documentation for Particulate Containment, Source SD-2:

Based on HRS Table 6-9.
All situations except those specifically listed.
Source consists of contaminated surface soil (intermittent stream sediment).

Reference: 1, p. 1 of 1; 3, pp. 1-5 of 5; 17, p. 76 of 584

Documentation for Source Type, Source SD-2:

Sampling performed by Radian Engineering in December 1994 indicated contaminants were present in a sediment sample from an intermittent surface water body on the site at concentrations greater than three times background levels. The intermittent sediment sample was evaluated as a soil sample.

Reference: 17, pp. 74 and 76 of 584

Documentation for Secondary Source Type, SD-2:

No secondary sources were found to be associated with SD-2.

Reference: 17, p. 32 of 584

Documentation for Particulate Containment, Source S-1:

Based on HRS Table 6-9.
All situations except those specifically listed = 10.
Source consists of contaminated surface soil.

Reference: 1, p. 1 of 1; 3, pp. 1-5 of 5; 17, p. 49 of 584

Documentation for Source Type, Source S-1:

Based on validated analytical results from the RI by Radian, S-1 was found to be contaminated with volatile organic compounds at concentrations greater than three times background levels.

Reference: 17, pp. 47 and 49 of 584

Documentation for Secondary Source Type, S-1:

No secondary sources were reported to be associated with this source.

Reference: 17, pp. 47 and 49 of 584

Documentation for Particulate Containment, Source SF-1:

Based on HRS Table 6-9.
All situations except those specifically listed = 10.
Source consists of contaminated surface soil.

Reference: 1, p. 1 of 1; 3, pp. 1-5 of 5; 17, p. 49 of 584

Documentation for Source Type, Source SF-1:

Based on validated analytical data from the RI, SF-1 was found to be contaminated with volatile organic compounds at concentrations greater than three times background values.

Reference: 17, pp. 47 and 49 of 584

Documentation for Secondary Source Type, SF-1:

No secondary sources were found to be associated with this sample location.

Reference: 17, pp. 47 and 49 of 584

Documentation for Particulate Containment, Source SF-2:

Based on HRS Table 6-9.
All situations except those specifically listed = 10.
Source consists of contaminated subsurface soil overlain by contaminated surface soil.

Reference: 1, p. 1 of 1; 17, pp. 47-50 of 584

Documentation for Source Type, Source SF-2:

Based on validated analytical results from the RI, subsurface soil at SF-2 was found to be contaminated with volatile organic compounds at concentrations greater than three times background levels.

Reference: 17, pp. 47, 48, and 50 of 584

Documentation for Secondary Source Type, SF-2:

No secondary sources were found to be associated with this location.

Reference: 17, pp. 47 and 50 of 584

Documentation for Particulate Migration Potential:

Based on HRS Figure 6-2.

Reference: 1, p. 1 of 1

Source: TCE UST CONTAM SOIL

Particulate Hazardous Substance

Source: SD-2

Particulate Hazardous Substance

Source: S-1

Particulate Hazardous Substance

Source: SF-1

Particulate Hazardous Substance

Source: SF-2

Particulate Hazardous Substance

AIR PATHWAY WASTE CHARACTERISTICS
Erdle Perforating - 11/16/95

Source: 1 TCE UST CONTAM SOIL

Source Hazardous Waste Quantity Value: 0.02

Hazardous Substance	Toxicity Value	Gas Mobility Value	Particulate Mobility Value	Toxicity/ Mobility Value
Dichloroethylene, trans-1,2-	100	1.00E+00	NA	1.00E+02
Tetrachloroethene	100	1.00E+00	NA	1.00E+02
Trichloroethylene	10	1.00E+00	NA	1.00E+01

AIR PATHWAY WASTE CHARACTERISTICS
Erdle Perforating - 11/16/95

Source: 2 SD-2

Source Hazardous Waste Quantity Value: 0.00

Hazardous Substance	Toxicity Value	Gas Mobility Value	Particulate Mobility Value	Toxicity/ Mobility Value
Dichloroethylene, trans-1,2-	100	1.00E+00	NA	1.00E+02
Tetrachloroethene	100	1.00E+00	NA	1.00E+02
Trichloroethylene	10	1.00E+00	NA	1.00E+01
Vinyl chloride	10000	1.00E+00	NA	1.00E+04

AIR PATHWAY WASTE CHARACTERISTICS
Erdle Perforating - 11/16/95

Source: 3 S-1

Source Hazardous Waste Quantity Value: 0.00

Hazardous Substance	Toxicity Value	Gas Mobility Value	Particulate Mobility Value	Toxicity/ Mobility Value
Dichloroethylene, trans-1,2-	100	1.00E+00	NA	1.00E+02
Trichloroethane, 1,1,1-	1	1.00E+00	NA	1.00E+00
Trichloroethylene	10	1.00E+00	NA	1.00E+01

AIR PATHWAY WASTE CHARACTERISTICS
Erdle Perforating - 11/16/95

Source: 4 SF-1

Source Hazardous Waste Quantity Value: 0.00

Hazardous Substance	Toxicity Value	Gas Mobility Value	Particulate Mobility Value	Toxicity/ Mobility Value
Dichloroethylene, trans-1,2-	100	1.00E+00	NA	1.00E+02

AIR PATHWAY WASTE CHARACTERISTICS
Erdle Perforating - 11/16/95

Source: 5 SF-2

Source Hazardous Waste Quantity Value: 0.00

Hazardous Substance	Toxicity Value	Gas Mobility Value	Particulate Mobility Value	Toxicity/ Mobility Value
Dichloroethylene, trans-1,2-	100	1.00E+00	NA	1.00E+02
Trichloroethylene	10	1.00E+00	NA	1.00E+01

Hazardous Substances Found in an Observed Release

Sample ID	Observed Release Hazardous Substance	Particulate Toxicity/ Mobility Value	Gas Toxicity/ Mobility Value

- N/A and/or data not specified

Documentation for Particulate Mobility:

Based on HRS Figure 6-3. Site is located in Monroe County, New York.

Reference: 1, p. 1 of 1

AIR PATHWAY WASTE CHARACTERISTICS
Erdle Perforating - 11/16/95

Toxicity/Mobility Value from Source Hazardous Substances:	1.00E+04
Toxicity/Mobility Value from Observed Release Hazardous Substances:	0.00E+00
Toxicity/Mobility Factor:	1.00E+04
Sum of Source Hazardous Waste Quantity Values:	1.66E-02
Hazardous Waste Quantity Factor:	10
Waste Characteristics Factor Category:	18

AIR PATHWAY TARGETS

Erdle Perforating - 11/16/95

Actual Contamination

No.	Sample ID	Distance (miles)	Level of Contamination

- N/A and/or data not specified

Potential Contamination

Distance Categories Subject to Potential Contamination	Population	Value
Onsite	60.0	5.3000
> 0 to 1/4 mile	190.0	4.1000
> 1/4 to 1/2 mile	576.0	2.8000
> 1/2 to 1 mile	3532.0	8.3000
> 1 to 2 miles	18051.0	8.3000
> 2 to 3 miles	25045.0	3.8000
> 3 to 4 miles	44150.0	7.3000
	Potential Contaminantion Factor:	40.0000

Documentation for Population Onsite Distance Category:

There are 60 people working on-site.

Reference: 3, p. 3 of 5

Documentation for Population > 0 to 1/4 mile Distance Category:

Population determined using population from 1990 census data by Frost Associates.

Reference: 19, p. 13 of 13

Documentation for Population > 1/4 to 1/2 mile Distance Category:

Population determined using population from 1990 census data by Frost Associates.

Reference: 19, p. 13 of 13

Documentation for Population > 1/2 to 1 mile Distance Category:

Population determined using population from 1990 census data by Frost Associates.

Reference: 19, p. 12 of 13

Documentation for Population > 1 to 2 miles Distance Category:

Population determined using population from 1990 census data by Frost Associates.

Reference: 19, p. 12 of 13

Documentation for Population > 2 to 3 miles Distance Category:

Population determined using population from 1990 census data by Frost Associates.

Reference: 19, p. 12 of 13

Documentation for Population > 3 to 4 miles Distance Category:

Population determined using population from 1990 census data by Frost Associates.

Reference: 19, p. 12 of 13

AIR PATHWAY TARGETS
Erdle Perforating - 11/16/95

Nearest Individual Factor

Level of Contamination: Potential
Distance in miles: 0 to 1/8

Nearest Individual Value: 20

Documentation for Nearest Individual:

The nearest regularly occupied building is the Erdle Perforating building at the site. There are 60 workers at the site. The estimated distance from contaminant sources to the building is 10 ft. = 0.002 mile.

Reference: 3, p. 3 of 5

Resources

Resource Use: NO

Resource Value: 0

Documentation for Resources:

No resources identified.

Reference:

Actual Contamination, Sensitive Environments

Sensitive Environment	Distance (miles)	Sensitive Environment Value
- N/A and/or data not specified		

Actual Contamination, Wetlands

Distance Category	Wetland Acreage	Wetland Acreage Value
- N/A and/or data not specified		

Sensitive Environments Actual Contamination Factor: 0.000
(Sum of Sensitive Environments + Wetlands Values)

AIR PATHWAY TARGETS
Erdle Perforating - 11/16/95

Potential Contamination, Sensitive Environments

Sensitive Environment	Distance (miles)	Sensitive Environment Value	Distance Weight	Weighted Value/10
Unnamed Tributary	0.000	5	1.0000	0.500
Little Black Creek	0.500	5	0.0540	0.027
Genesee River	2.900	5	0.0023	0.001
Erie Canal	2.300	5	0.0023	0.001
Sum of Sensitive Environments Weighted Values/10:				0.529

Potential Contamination, Wetlands

Distance Category	Wetland Acreage	Wetland Acreage Value	Distance Weight	Weighted Value/10
> 3 to 4 miles	2006.0	500.0	0.0014	0.070
> 2 to 3 miles	940.0	500.0	0.0023	0.115
> 1 to 2 miles	323.1	350.0	0.0051	0.179
> 1/2 to 1 mile	167.0	175.0	0.0160	0.280
> 1/4 to 1/2 mile	30.2	25.0	0.0540	0.135
> 0 to 1/4 mile	9.3	25.0	0.2500	0.625
Total Wetland Acreage:	3475.6			
		Sum of Wetland Weighted Acreage Values/10:		1.404

Sensitive Environment Potential Contamination Factor: 2.000

Documentation for Sensitive Environment Tot. Wetland Acre:

Based on a planimetric study of Reference 30.
Total wetland acreage from 0 to 0.25 mile from the site = 9.33 acres.

Reference: 30, p. 1 of 1; 34, p. 1 of 1

Documentation for Sensitive Environment Tot. Wetland Acre:

Based on a planimetric study of Reference 30.
Total wetland acreage from 0.25 to 0.5 mile from the site = 30.21 acres.

Reference: 30, p. 1 of 1; 34, p. 1 of 1

Documentation for Sensitive Environment Tot. Wetland Acre:

Based on a planimetric study of Reference 30.
Total wetland acreage from 0.5 to 1 mile from the site = 167.0 acres.

Reference: 30, p. 1 of 1; 34, p. 1 of 1

Documentation for Sensitive Environment Tot. Wetland Acre:

Based on a planimetric study of Reference 30.
Total wetland acreage from 1 to 2 miles from the site = 323.12 acres.

Reference: 30, p. 1 of 1; 34, p. 1 of 1

Documentation for Sensitive Environment Tot. Wetland Acre:

Based on a planimetric study of Reference 30.
Total wetland acreage from 2 to 3 miles from the site = 940 acres.

Reference: 30, p. 1 of 1; 34, p. 1 of 1

Documentation for Sensitive Environment Tot. Wetland Acre:

Based on a planimetric study of Reference 30.
Total wetland acreage from 3 to 4 miles from the site = 2005.6 acres.

Reference: 30, p. 1 of 1; 34, p. 1 of 1

Documentation for Sensitive Environment Unnamed Tributary:

The unnamed tributary to Little Black Creek is designated as a Class C stream within the 4-mile radius of the site. The unnamed tributary is located adjacent to the site.
Class C streams are protected for fish life and fish propagation.
HRS Table 4-23 used to determine sensitive environment value.
State designated areas for the protection of aquatic life = 5.

Reference: 1, p. 1 of 1; 27, pp. 14 and 17 of 18; 28, p. 4 of 5

Documentation for Sensitive Environment Little Black Creek:

Little Black Creek is designated as a Class C and Class B stream within the 4-mile radius of the site. At its nearest location from the site, the Little Black Creek is located 0.5 mile from the site.
Class C and Class B steams are protected for fish life and fish propagation.
HRS Table 4-23 used to determine sensitive environment value.
State designated areas for the protection of aquatic life = 5.

Reference: Fig. 1; 1, p. 1 of 1; 27, pp. 14, 17 & 18 of 18; 28, p. 4 of 5

Documentation for Sensitive Environment Genesee River:

The Genesee River is designated as a Class B stream within the 4-mile radius of the site. At its nearest location from the site, the Genesee River is located 2.9 miles from the site.
Class B streams are protected for fish life and fish propagation.
HRS Table 4-23 used to determine sensitive environment value.
State designated areas for the protection of aquatic life = 5.

Reference: 1, p. 1 of 1; 27, pp. 13 & 18 of 18; 28, p. 4 of 5; 30, p.1 of1

Documentation for Sensitive Environment Erie Canal:

The Erie Canal is designated as a Class B stream within the 4-mile radius of the site. At its nearest location, the canal is located 2.3 miles from the site.
Class B streams are protected for fish life and fish propagation.
HRS Table 4-23 used to determine sensitive environment value.
State designated areas for the protection of aquatic life = 5.

Reference: 1, p. 1 of 1; 27, pp. 6 & 8 of 18; 28, p. 4 of 5; 30, p. 1 of 1